Hisense

MULTI-SPLIT TYPE AIR CONDITONER

SERVICE MANUAL

V: 3.0

- **INDOOR UNIT:**

  AMS-07UR4SNZA3
  AMS-09UR4SNZA3
  AMS-12UR4SNZA3
  AMS-18UR4SPZA3
  AMD-09UX4SJC
  AMD-12UX4SJC
  AMD-18UX4SJC

- **OUTDOOR UNIT:**

  AMW2-16U4SGC
  AMW2-20U4SNC
  AMW3-24U4SKC
  AMW4-28U4SKC

Hisense Corporation

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1. OPERATING RANGE

	Temperature	Indoor Air Intake Temp.	Outdoor Air Intake Temp
COOLING	Maximum	32℃ D.B./23℃ W.B.	43 ℃ D.B./26℃ W.B.
	Minimum	21℃ D.B./15℃ W.B.	21 ℃ D.B./15℃ W.B.
HEATING	Maximum	27℃ D.B./18℃ W.B.	24℃ D.B./18℃ W.B.
	Minimum	20℃ D.B/≤15℃ W.B	-7℃ D.B./-8℃ W.B.

2. SPECIFICATIONS

2-1. Unit specifications

2-1-1.OUTDOOR UNIT

Model			AMW4-28U4SKC		AMW3-24U4SKC		AMW2-20U4SNC		AMW2-16U4SGC	
Function			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Power supply			a.c 220V~240V/50Hz							
Capacity	Capacity	kW	8.2	9.0	7.0	8.0	5.8	6.4	4.6	5.3
	Dehumidification	ℓ/h	----	----	----	----	----	----	----	----
	Air flow	m^3/h	----	----	----	----	----	----	----	----
Electrical data	Rated current	A	10.7	11.1	9.7	10.1	7.7	8.0	6.1	5.7
	Rated input	kW	2.4	2.49	2.18	2.21	1.7	1.75	1.4	1.3
	Auxiliary heater	A	------							
	Power factor	%	99.9%		99.9%		99.9%		99.9%	
	Max. current	A	15.0		15.0		14.5		14.5	
SEER/HSPF			----							
Compressor	Model		ATL165SD-C9AU				DA130S1C-20FZ		DA130S1C-20FZ	
	Winding resistance	Ω	0.590 (at75℃)				0.95（20℃）		0.95（20℃）	
Outdoor fan motor	Model		YDK70-6H-3				YDK55-6I-8		YDK29-6I-22	
	Winding resistance (at20℃)	Ω	M:78;A:80				M:185;A:200		M:283.5;A:180	
Net size	L×W×H	cm	109×41×84				98×35×64		80×26×57	
Package size	L×W×H	cm	112×46×98				108×42×72		94×36×64	
Net weight		kg	67		66		46.2		37.5	
Gross weight		kg	77		72		52.5		41	
Refrigerant piping	Liquid pipe	mm	6.35×4		6.35×3		6.35×2		6.35×2	
	Gas pipe	mm	9.52×4		9.52×3		9.52×2		9.52×2	
	Connection method		Flare				Flare		Flare	
Special remarks	Air direction		----		----		----		----	
	Sound level (Hi)	dB	57				57		56	
	Fan speed (Hi)	rpm	840				840		900	
	Fan speed regulator		3				3		3	
	Refrigerant filling capacity(R410a)	kg	2.1		2.4		1.4		1.0	
	Throttle mode		EEV		EEV		EEV		EEV	

NOTE :Test conditions：

Cooling : Indoor: DB27℃/ WB19℃ Outdoor: DB35℃/ WB24℃

Heating: Indoor: DB20℃/ WB15℃ Outdoor: DB7℃／ WB 6℃

2. SPECIFICATIONS

2-1-2.INDOOR UNIT

Model			AMS-07UR4SNZA3 AMS-09UR4SNZA3		AMS-12UR4SNZA3		AMS-18R4SPZA3	
Function			Cooling	Heating	Cooling	Heating	Cooling	Heating
Power supply			a.c 220V~240V/50Hz					
Capacity	Capacity	kW	2.6	3.0	3.2	3.8	4.8	5.5
	Dehumidification	l /h	1.1	----	1.4	----	1.5	----
	Air flow	m3/h	420	520	450	560	700	800
Electrical data	Running current	A	0.18	0.18	0.18	0.18	0.2	0.18
	Rated input	kW	40	40	40	40	45	40
	Auxiliary heater	A	----					
	Power factor	%	----					
	Starting current	A	----					
SEER/HSPF			----					
Compressor	Model		----					
	Winding resistance (at25℃)	Ω	----					
Indoor fan motor	Model		YYW16-4-532				YYW28-4-2085B	
	Winding resistance (at20℃)	Ω	M:364;A:400.5;				M:246.2;A:191;	
Outdoor fan motor	Model		----					
	Winding resistance (at20℃)	Ω	----					
Net size	L×W×H	cm	75×25×19				87×23×31	
Package size	L×W×H	cm	84×31×27				96×40×34	
Net weight		kg	8.0				12.0	
Gross weight		kg	9.5				14.0	
Refrigerant piping	Liquid pipe	mm	6.35					
	Gas pipe	mm	9.52					
	Connection method		----					
Special remarks	Air direction		6				6	
	Sound level (Hi)	dB	37				49	
	Fan speed (Hi)	rpm	1200				1300	
	Fan speed regulator		3				3	
	Refrigerant filling capacity(R410a)	kg	----					
	Throttle mode		----					

NOTE :Test conditions:

Cooling : Indoor: DB27℃/ WB19℃ Outdoor: DB35℃/ WB24℃

Heating: Indoor: DB20℃/ WB15℃ Outdoor: DB7℃/ WB 6℃

2. SPECIFICATIONS

Model			AMD-09UX4SJC		AMD-12UX4SJC		AMD-18UX4SJC	
Function			Cooling	Heating	Cooling	Heating	Cooling	Heating
Power supply			a.c 220V~240V/50Hz					
Capacity	Capacity	kW	2.6	3.0	3.2	3.7	5.0	5.5
	Dehumidification	l /h	1.5	----	1.5	----	1.9	----
	Air flow	m3/h	440	520	440	520	600	700
Electrical data	Running current	A	0.2	0.2	0.2	0.2	0.3	0.3
	Rated input	kW	44	44	44	44	66	66
	Auxiliary heater	A	----					
	Power factor	%	----					
	Starting current	A	----					
SEER/HSPF			----					
Compressor	Model		----					
	Winding resistance (at25℃)	Ω	----					
Indoor fan motor	Model		YSK25-4G				YSK40-4E	
	Winding resistance (at20℃)	Ω	M:247;A:150				M:247;A:150	
Outdoor fan motor	Model		----					
	Winding resistance (at20℃)	Ω	----					
Net size	L×W×H	mm	770×600×190				770×600×190	
Package size	L×W×H	mm	946×692×236				946×692×236	
Net weight		kg	20				21	
Gross weight		kg	24				25	
Refrigerant piping	Liquid pipe	mm	6.35					
	Gas pipe	mm	9.52					
	Connection method		----					
Special remarks	Air direction		----				----	
	Sound level (Hi)	dB	35				37	
	Fan speed	rpm	10pa：980/850/700 30pa：1150/1070/940				10pa：1290/1150/1010 30pa：1400/1310/1150	
	Fan speed regulator		6				6	
	Refrigerant filling capacity(R410a)	kg	----					
	Throttle mode		----					

NOTE :Test conditions：

Cooling : Indoor: DB27℃/ WB19℃ Outdoor: DB35℃/ WB24℃

Heating: Indoor: DB20℃/ WB15℃ Outdoor: DB7℃/ WB 6℃

2. SPECIFICATIONS

2-2. Major component specifications

2-2-1.INDOOR FAN MOTOR

ELECTRIC PERFORMANCE	PARAMETER		
	AMS-07UR4SNZA3 AMS-09UR4SNZA3	AMS-12UR4SNZA3	AMS-18R4SPZA3
Motor model	YYW16-4-532		YYW28-4-2085B
Rated power source	220V 50Hz		220V 50Hz
Phases/Poles	1/4		1/4
Rated load output(W)	16		28
Rated speed(r/min)	--		1250
Ambient temperature(℃)	-5℃～+43℃.		-5℃～+43℃

ELECTRIC PERFORMANCE	PARAMETER		
	AMD-09UX4SJC	AMD-12UX4SJC	AMD-18UX4SJC
Motor model	YSK25-4G		YSK40-4E
Rated power source	220V 50Hz		220V 50Hz
Phases/Poles	1/4		1/4
Rated load output(W)	25		44
Rated speed(r/min)	1150/1070/940(Red) 980/850/700(White)		1400/1310/1150(Red) 1290/1150/1010(White)
Ambient temperature(℃)	-5℃～+43℃.		-5℃～+43℃

2-2-2 OUTDOOR FAN MOTOR

ELECTRIC PERFORMANCE	PARAMETER		
	AMW3-24U4SKC AMW4-28U4SKC	AMW2-20U4SNC	AMW2-16U4SGC
Motor model	YDK70-6H-3	YDK55-6I-8	YDK29-6I-22
Rated power source	220V 50Hz	220V 50Hz	220V 50Hz
Phases /Poles	1/6	1/6	1/6
Rated load output(W)	65	47	28
Ambient temperature(℃)	-5℃～+43℃	-5℃～+43℃	-5℃～+43℃

2-2-3. COMPRESSOR

ELECTRIC PERFORMANCE	PARAMETER	
	AMW3-24U4SKC AMW4-28U4SKC	AMW2-20U4SNC AMW2-16U4SGC
Compressor model	ATL165SD-C9AU	DA130S1C-20FZ
Compressor type	Rotary	Rotary
Rated power	1550W	990W
Current (A)	10.7	4.97

2. SPECIFICATIONS

Motor	Motor type	DC brushless motor	DC brushless motor
	Starting type	DC Inverter	DC Inverter
	Winding resistance	0.59/0.59/0.59Ω(at 75℃) U-V/V-W/W-U	0.95/0.95/0.95Ω(at 20℃) U-V/V-W/W-U
Number of cylinder		2	2
Oil type		α 68HES-H or equivalent	ESTER OIL VG74
Oil charge (cc)		880	500
Ambient temperature(℃)		-5℃～+43℃.	-5℃～+43℃

2-3. Other component specifications

2-3-1. INDUCTANCE

ELECTRIC PERFORMANCE	PARAMETER	
	AMW3-24U4SKC AMW4-28U4SKC	AMW2-20U4SNC AMW2-16U4SGC
Inductance model	R2550HSA	R2050HSB
Rated power source	220V 50Hz	220V 50Hz
Rated current(A)	25	20
Rated inductance	5.0(mH)±10%	5.2（mH）±10%
Ambient temperature(℃)	-20℃～+70℃.	-20℃～+70℃.

2-3-2. FILTER

ELECTRIC PERFORMANCE	AMW3-24U4SKC AMW4-28U4SKC	AMW2-20U4SNC AMW2-16U4SGC
Filter model	RTNF-250T10X-3LF	RTNF250-25T068X-03LF
Rated current(A)	20	20
Rated power source	AC 220V—50Hz	AC 220V—50Hz
Filter frequency range	150K—30MHHz	150K—30MHHz
Temperature range(℃)	-25℃～+85℃.	-25℃～+85℃.

2. SPECIFICATIONS

2-3-4. STEPPER MOTOR

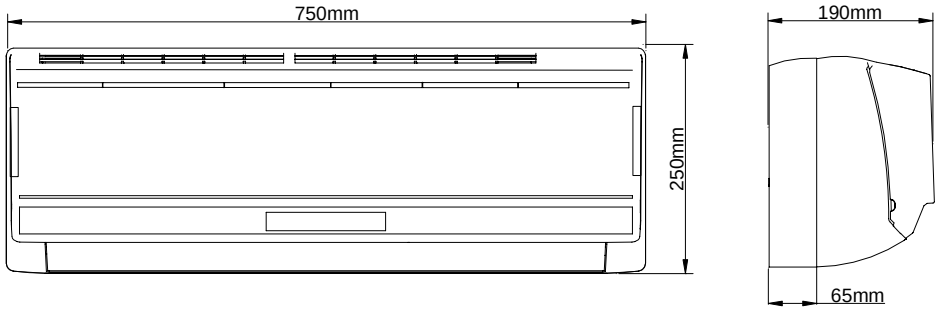
ELECTRIC PERFORMANCE	PARAMETER		
	AMS-07UR4SNZA3 AMS-09UR4SNZA3	AMS-12UR4SNZA3	AMS-18UR4SPZA3
Stepper Motor model	24BYJ48-CP		24BYJ48-B1
Voltage(DC)	12V		12V
Number of phase	4		4
Drive mode	1-2phase excitation unipolar drive		1-2phase excitation unipolar drive
Resistance per phase	300Ω±7%		300Ω±7%
Temperature range(℃)	-10℃～+40℃		-10℃～+40℃

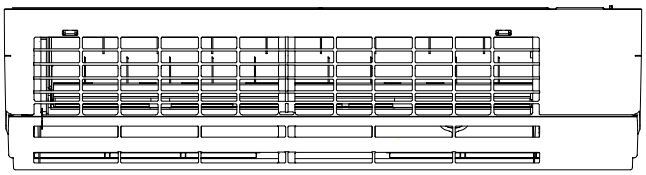
2-3-5. OVERLOAD PROTECTION

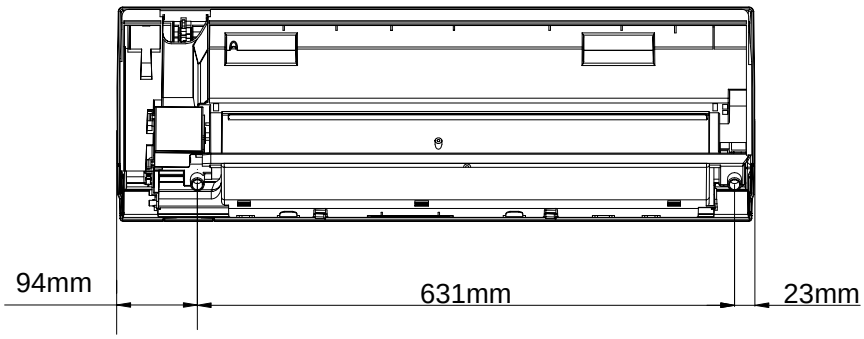
NONE.

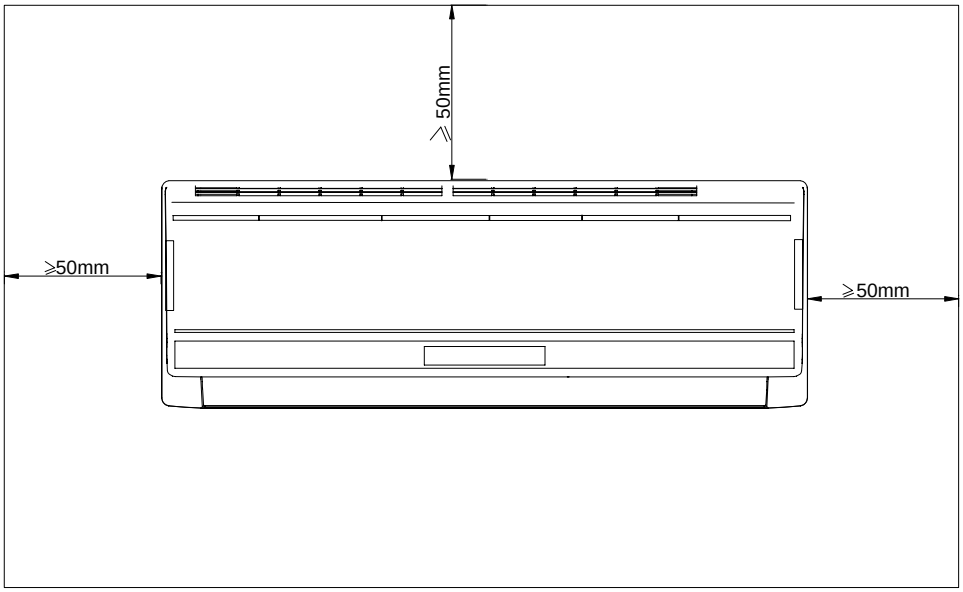
3. OUTLINES AND DIMENSIO

3-1. INDOOR（MODEL: AMS-07UR4SNZA3、AMS-09UR4SNZA3、AMS-12UR4SNZA3）



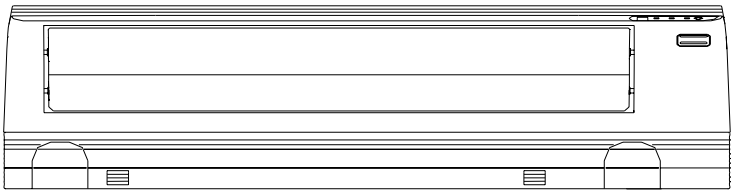


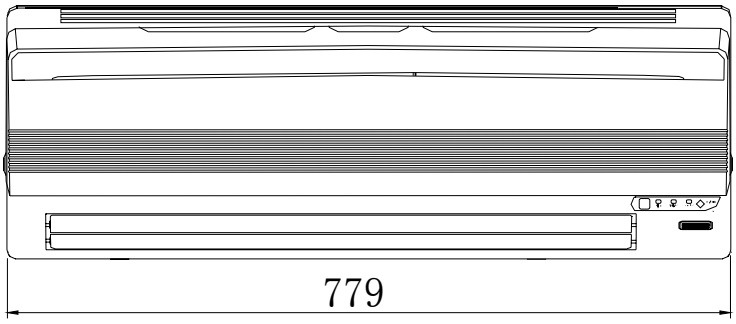


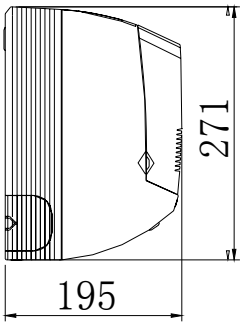


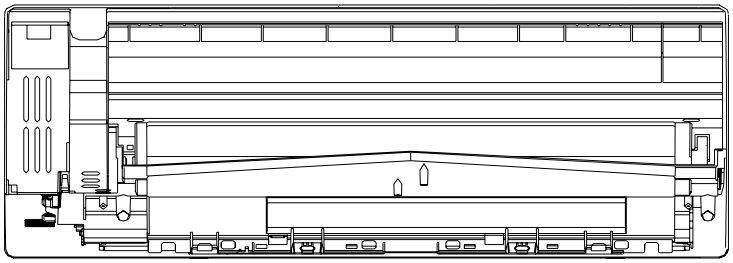
3. OUTLINES AND DIMENSIO

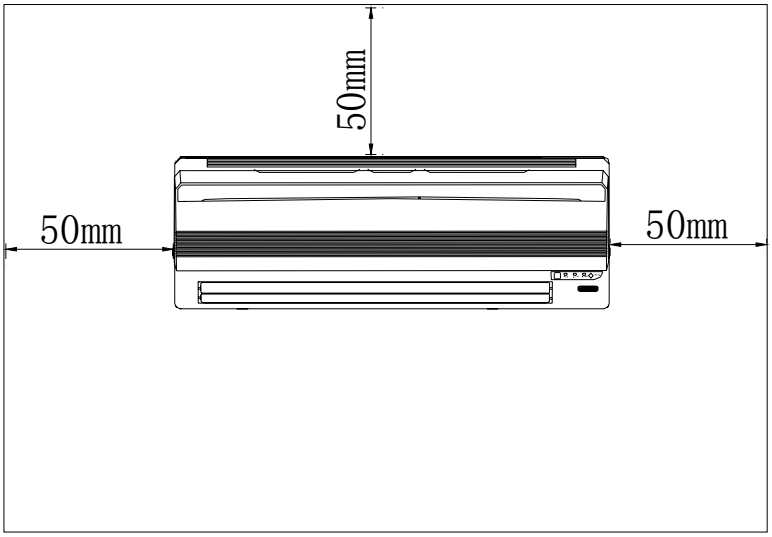
3-2. INDOOR（MODEL: AMS-18UR4SPZA3）





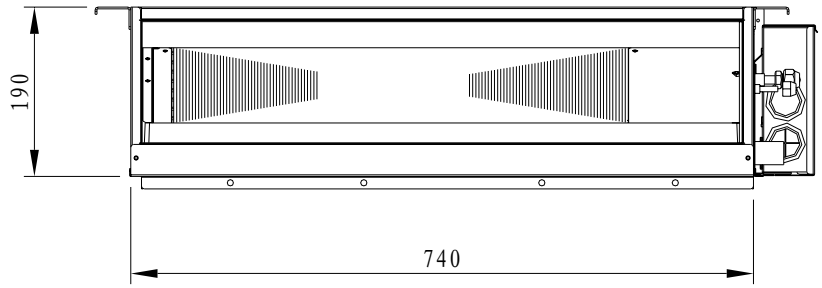


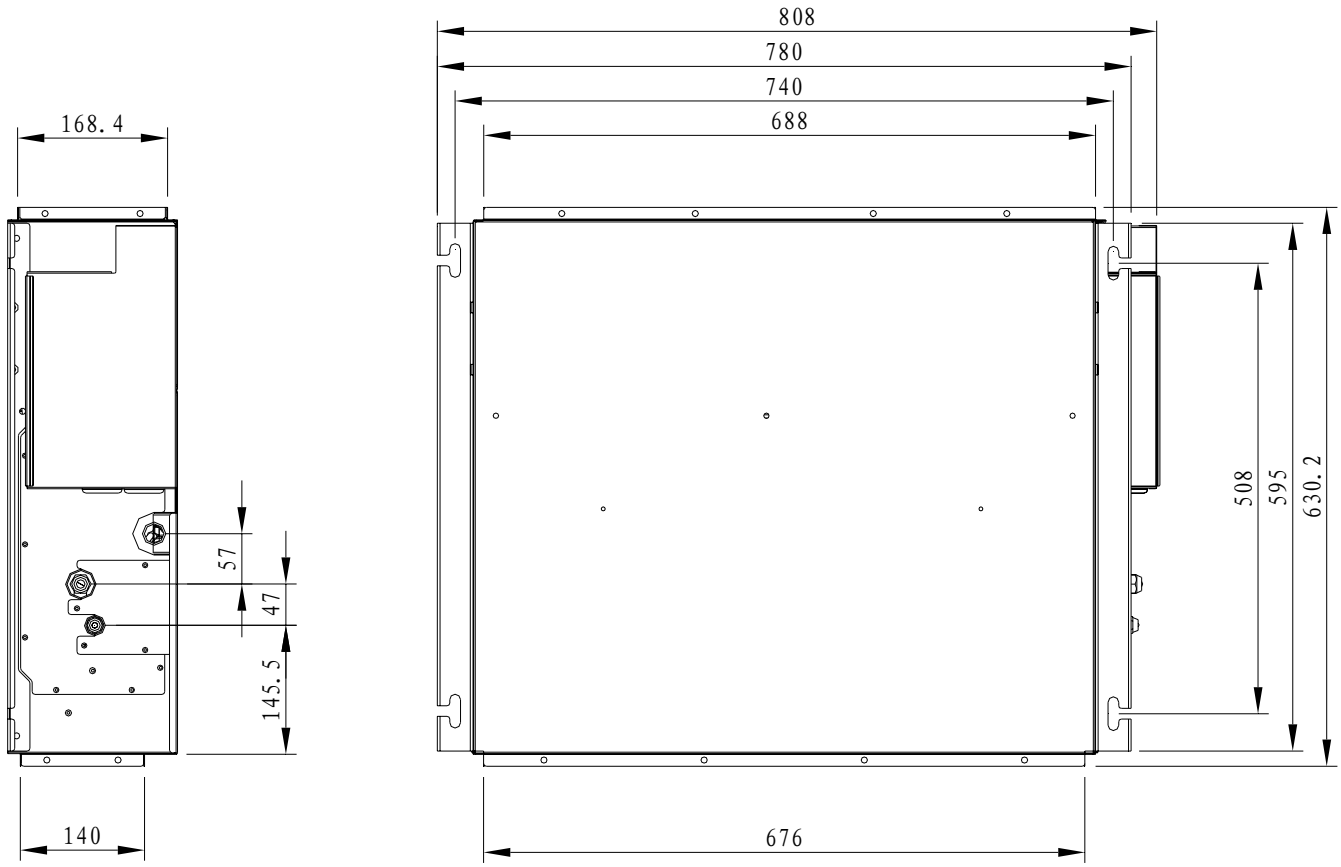


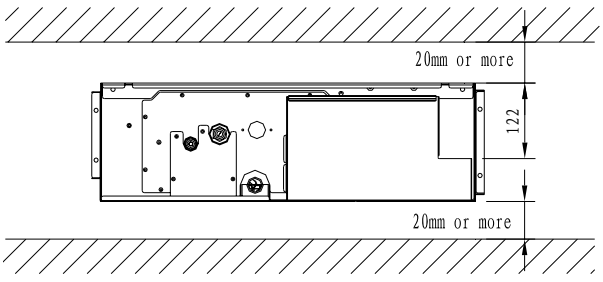


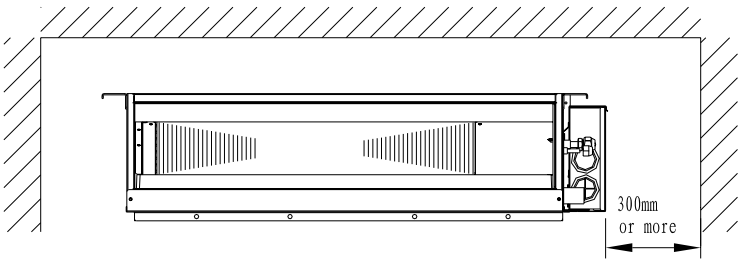
3. OUTLINES AND DIMENSIO

3-3. INDOOR（MODEL: AMD-09UX4SJC/AMD-12UX4SJC/AMD-18UX4SJC）



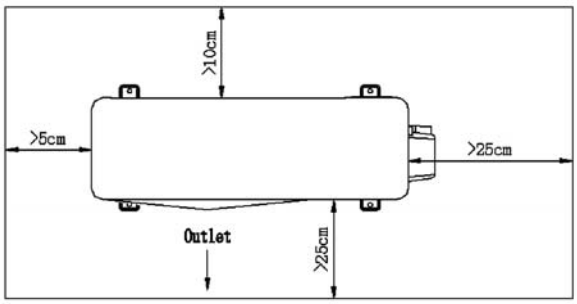


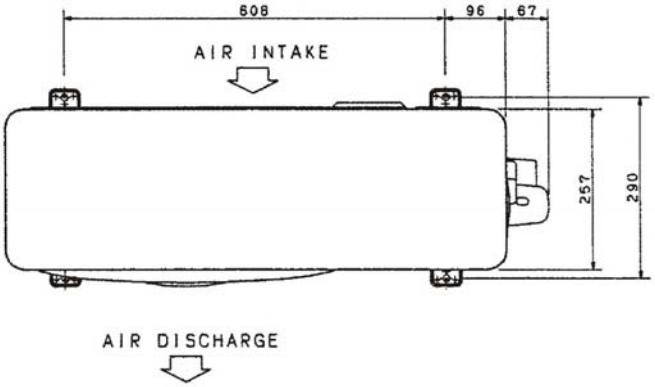


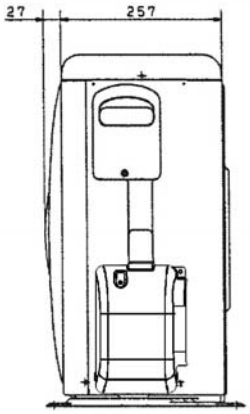


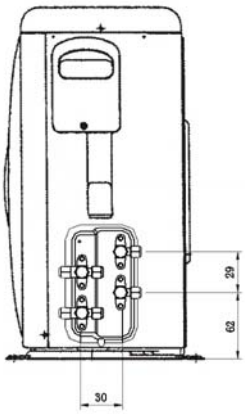
3. OUTLINES AND DIMENSIO

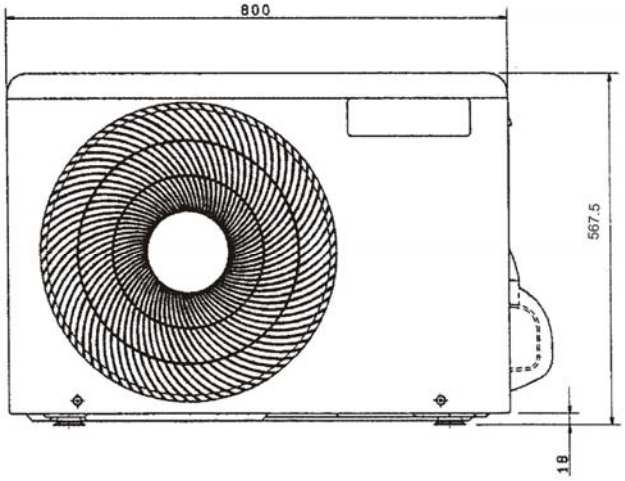
3-3.OUTDOOR（MODEL: AMW2-16U4SGC）





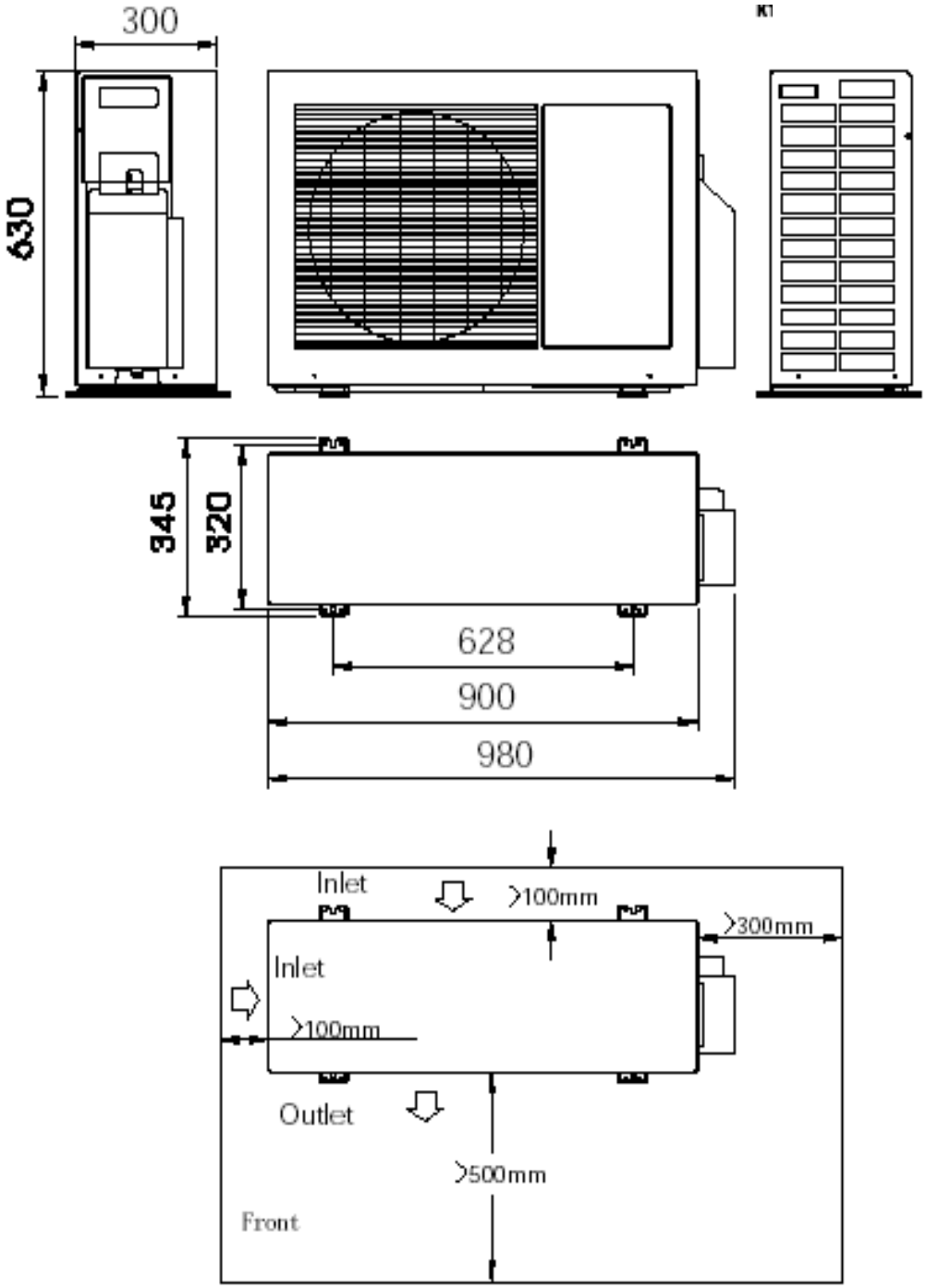






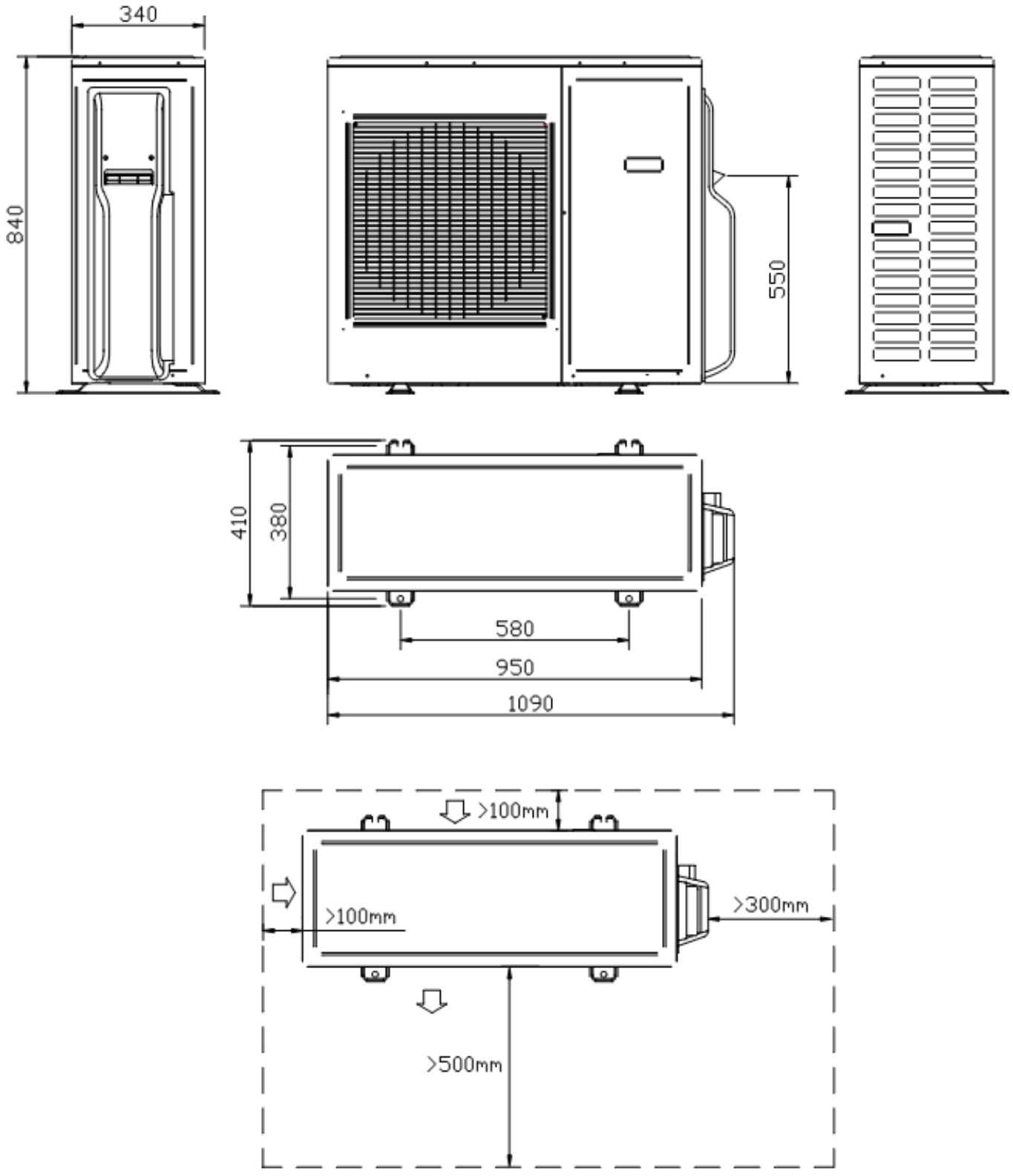
3. OUTLINES AND DIMENSIO

3-4.OUTDOOR（MODEL: AMW2-20U4SNC）



3. OUTLINES AND DIMENSIO

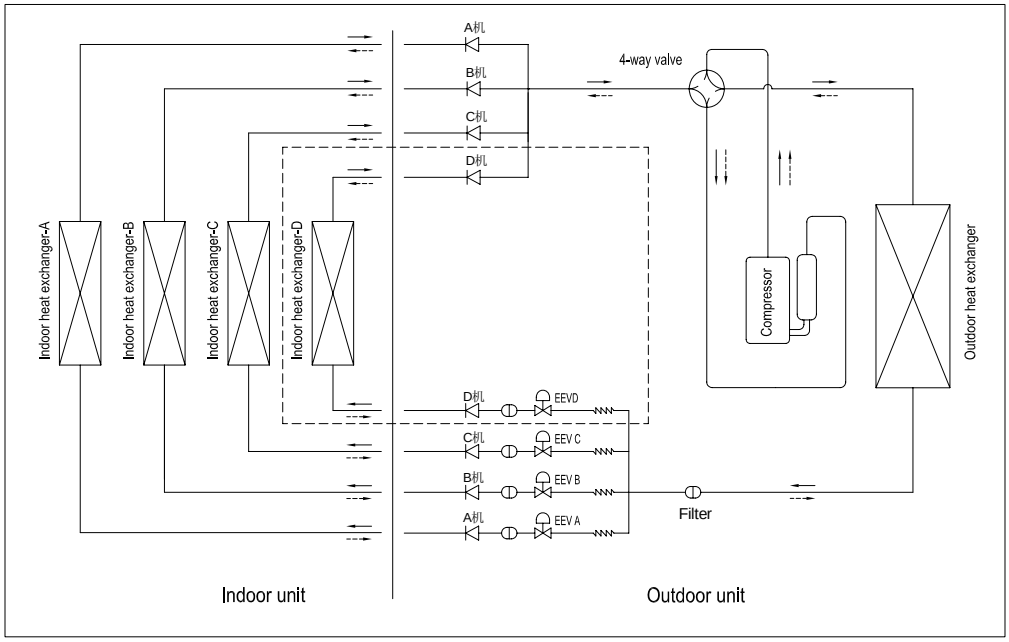
3-5.OUTDOOR（MODEL: AMW3-24U4SKC、AMW4-28U4SKC）



4. REFRIGERANT FLOW DIAGRAM

4-1. Refrigerant flow diagram ：

MODEL：AMW3-24U4SKC、AMW4-28U4SKC



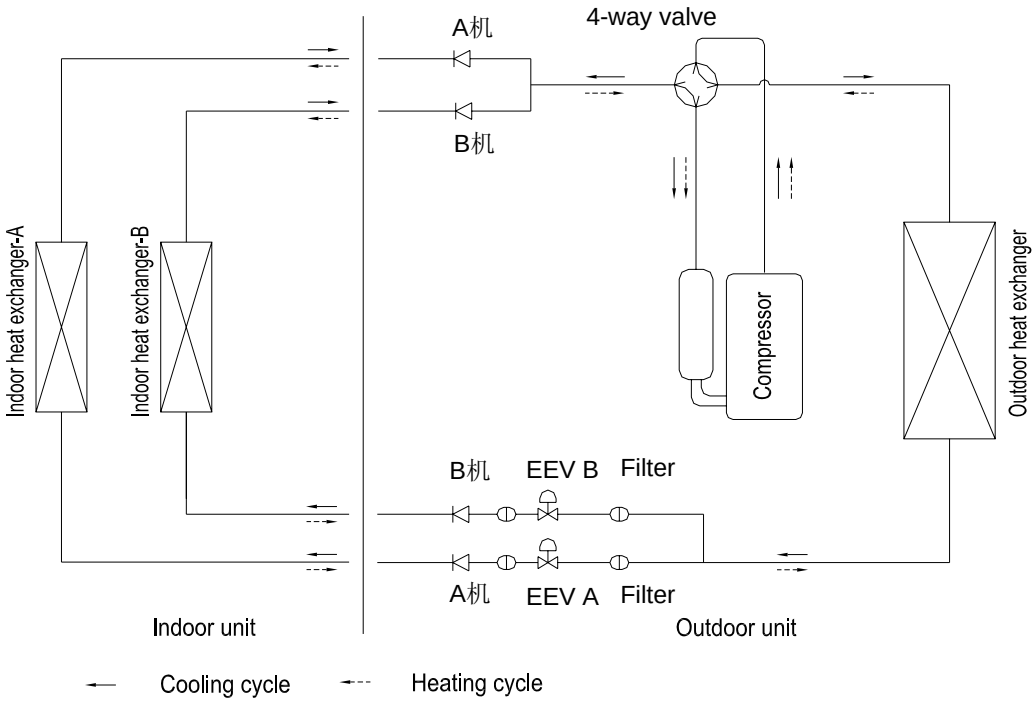
Remark： **The part is only for AMW4-28U4SKC**

COOLING CYCLE

HEATING CYCLE

4. REFRIGERANT FLOW DIAGRAM

MODEL：AMW2-20U4SNC　AMW2-16U4SGC



4. REFRIGERANT FLOW DIAGRAM

4-2. Evacuation procedures：

EVACUATION PROCEDURES

⇩

Connect the refrigerant pipes (both the liquid and gas pipes) between the indoor and the outdoor units.

⇩

Remove service port cap of the stop valve A and connect gage manifold valve and vacuum pump to it.

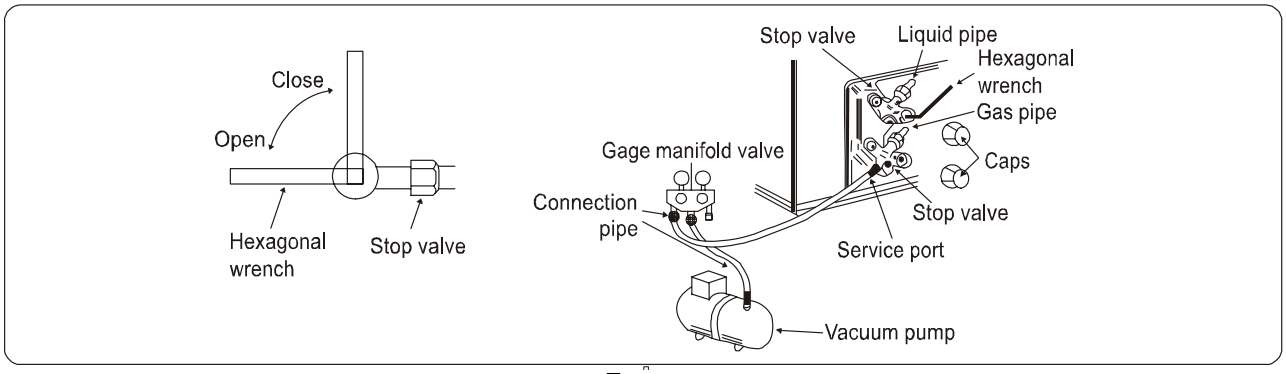
⇩

Run the vacuum pump for more than 15 minutes and at this time confirm that the pressure gage indicates -0.1Mpa(-76 cmHg).

⇩

Stop pump and keep the pressure for one or two minutes. Make sure the pressure is no change(if the pressure is changed to high, there is some leakage for the pipe connection).

⇩



⇩

Remove gage manifold valve quickly from the service port of the stop valve A. full open the stop valves A on gas and liquid pipe sides.

⇩

Repeat the steps above for other valves(B\C\D), be sure all refrigerant pipes are connected and evacuated, and all valves are full opend.

⇩

Total pipe length is in the range: No gas charge is needed

Total pipe length exceeding the limit: Charge the prescribed amount of gas.

⇩

Tighten the cap to the service port to obtain the initial status.

⇩

Retighten the cap.

⇩

Leak test

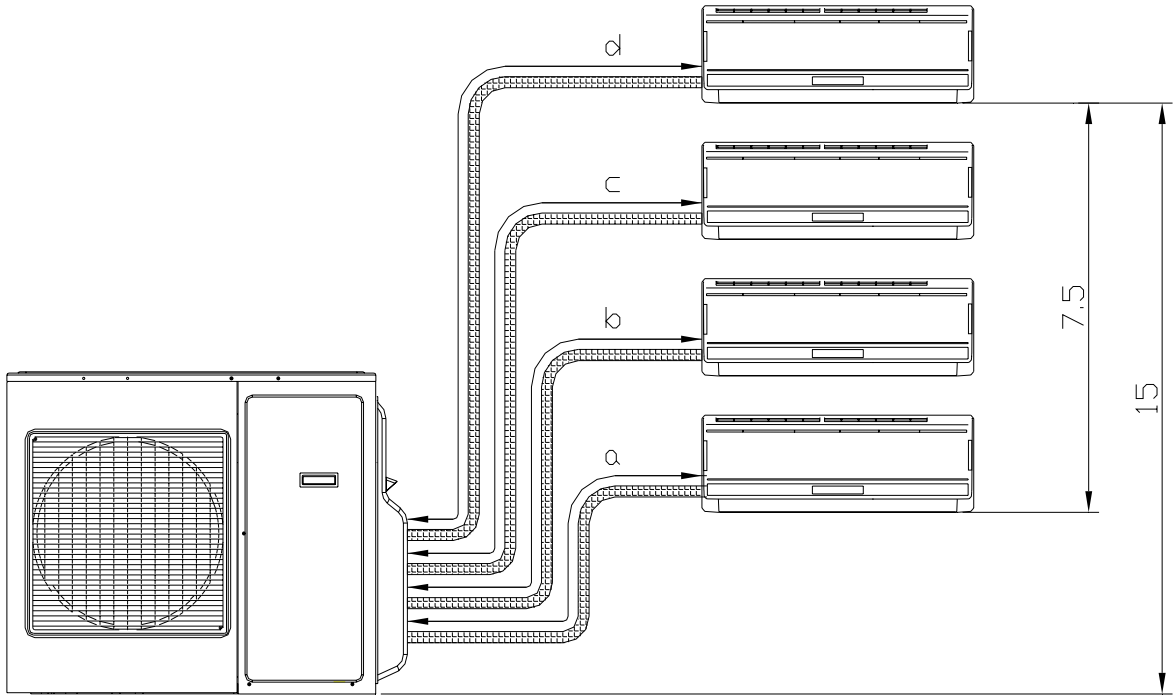
4. REFRIGERANT FLOW DIAGRAM

4-3. Evacuation direction：

MAX. Refrigerant pipe length and height difference:

Modle	AMW3-24U4SKC AMW4-28U4SKC	AMW2-20U4SNC AMW2-16U4SGC
Pipe length per. Indoor unit（a/b/c/d）	25m	20m
Total pipe length for multi-system (a+b+c+d)	60m	40m
Height difference (I.D ~ O.D)	15m	15m
Height difference (I.D ~ I.D)	7.5m	7.5m

*Do your best to reduce the pipe length. Long pipe may cause capacity of the indoor unit incline.



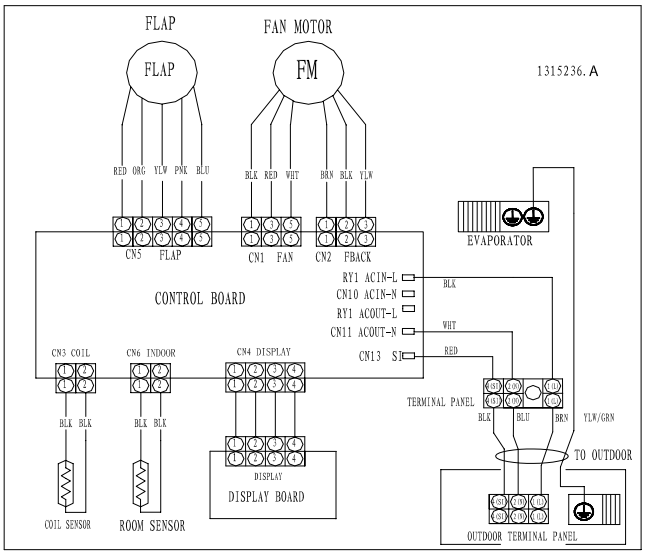
Outdoor unit precharged		Total refrigerant pipe length	
		0m~20m	20m～60m
AMW3-24U4SKC	2100g	0g	Xg = 15g / m × (Total pipe length(m) - 20)
AMW4-28U4SKC	2400g	0g	
Outdoor unit precharged		Total refrigerant pipe length	
		0m~15m	15m～40m
AMW2-20U4SNC	1400g	0	Xg = 15g / m × (Total pipe length(m) - 15)
AMW2-16U4SGC	1300g		

5. ELECTRICAL DATA

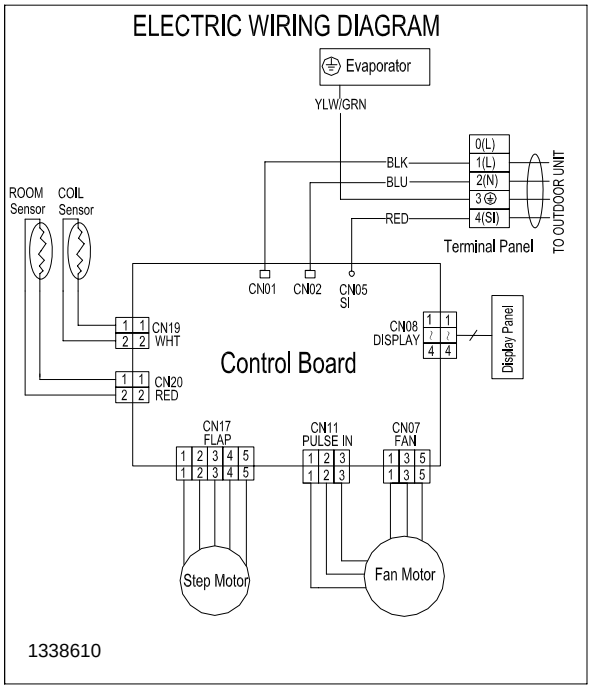
5-1.Electrical wiring diagrams

INDOOR：

1）AMS-07UR4SNZA3、AMS-09UR4SNZA3、AMS-12UR4SNZA3

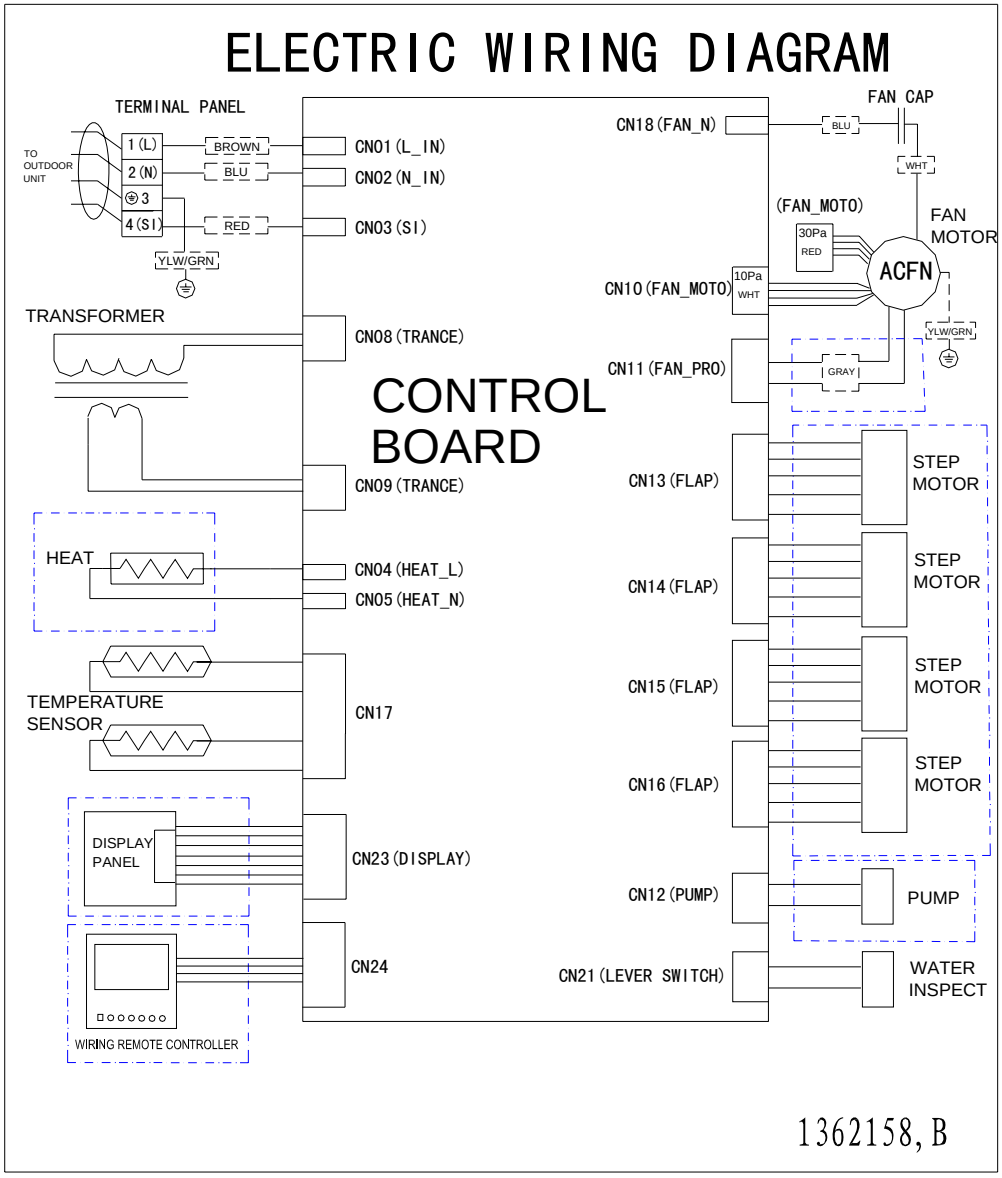


2）AMS-18UR4SPZA3



5. ELECTRICAL DATA

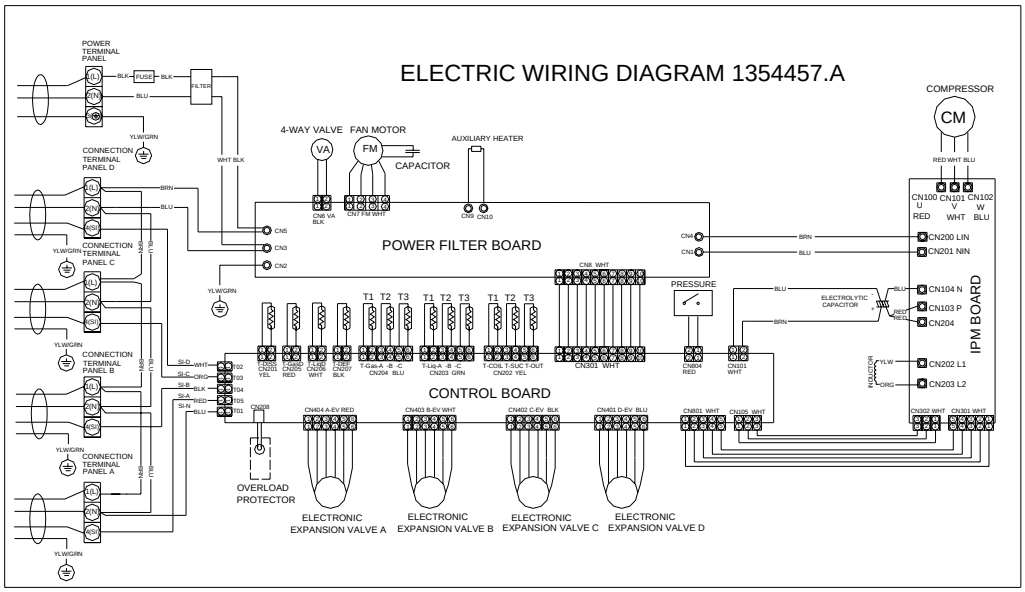
2）AMD-09UX4SJC、AMD-12UX4SJC、AMD-18UX4SJC



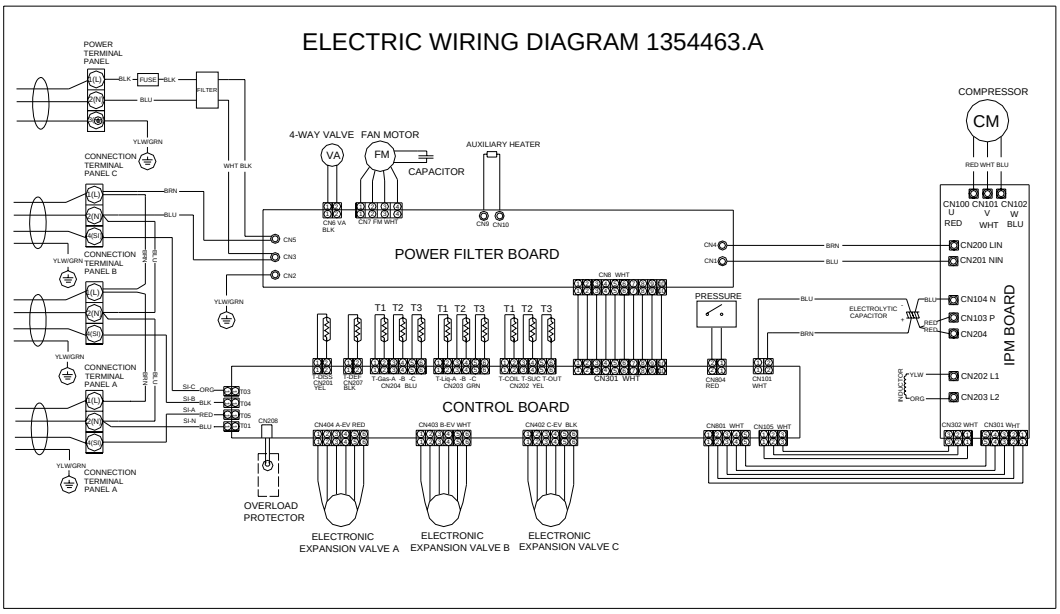
5. ELECTRICAL DATA

OUTDOOR：

1）AMW4-28U4SKC

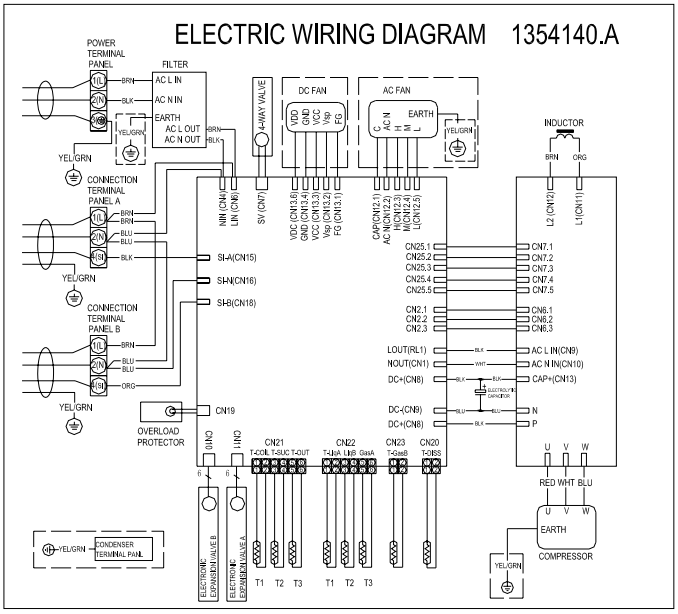


2）AMW3-24U4SKC：

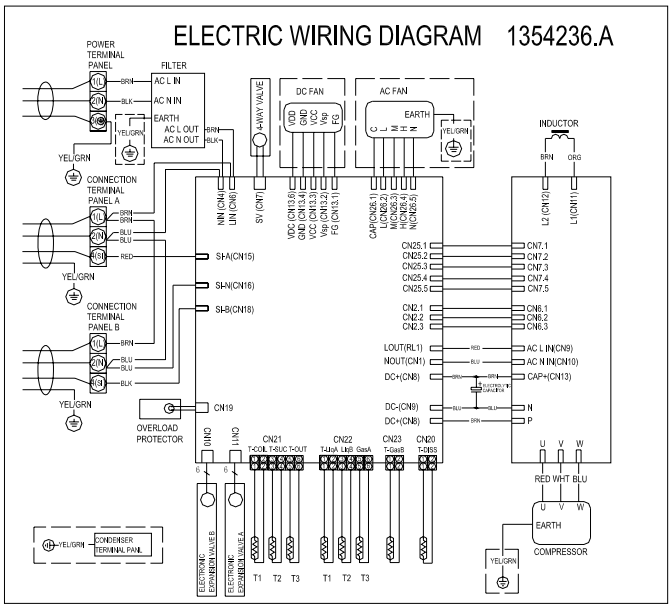


5. ELECTRICAL DATA

3）AMW2-20U4SNC：



4）AMW2-16U4SGC：

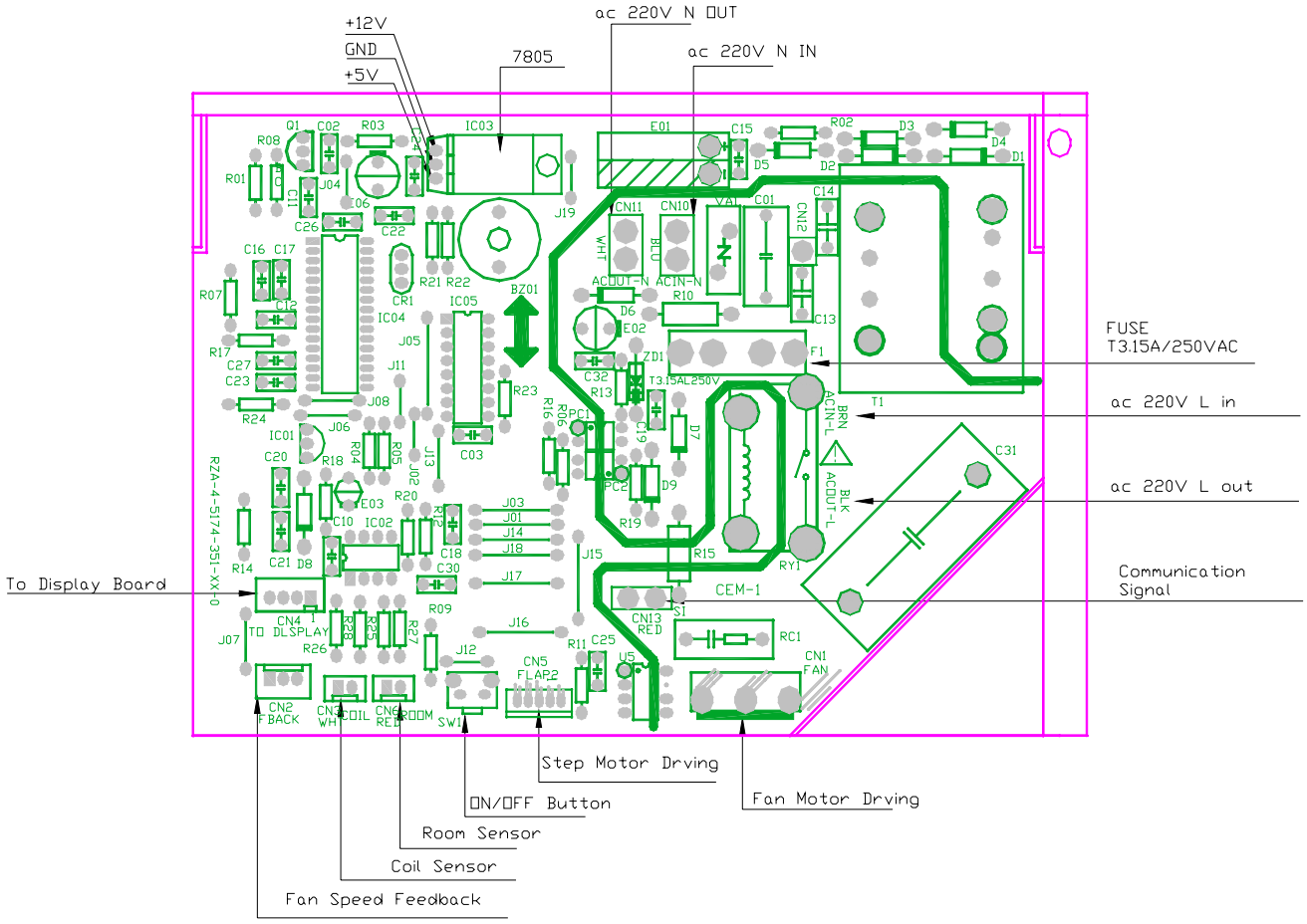


5. ELECTRICAL DATA

5-2. Electric control

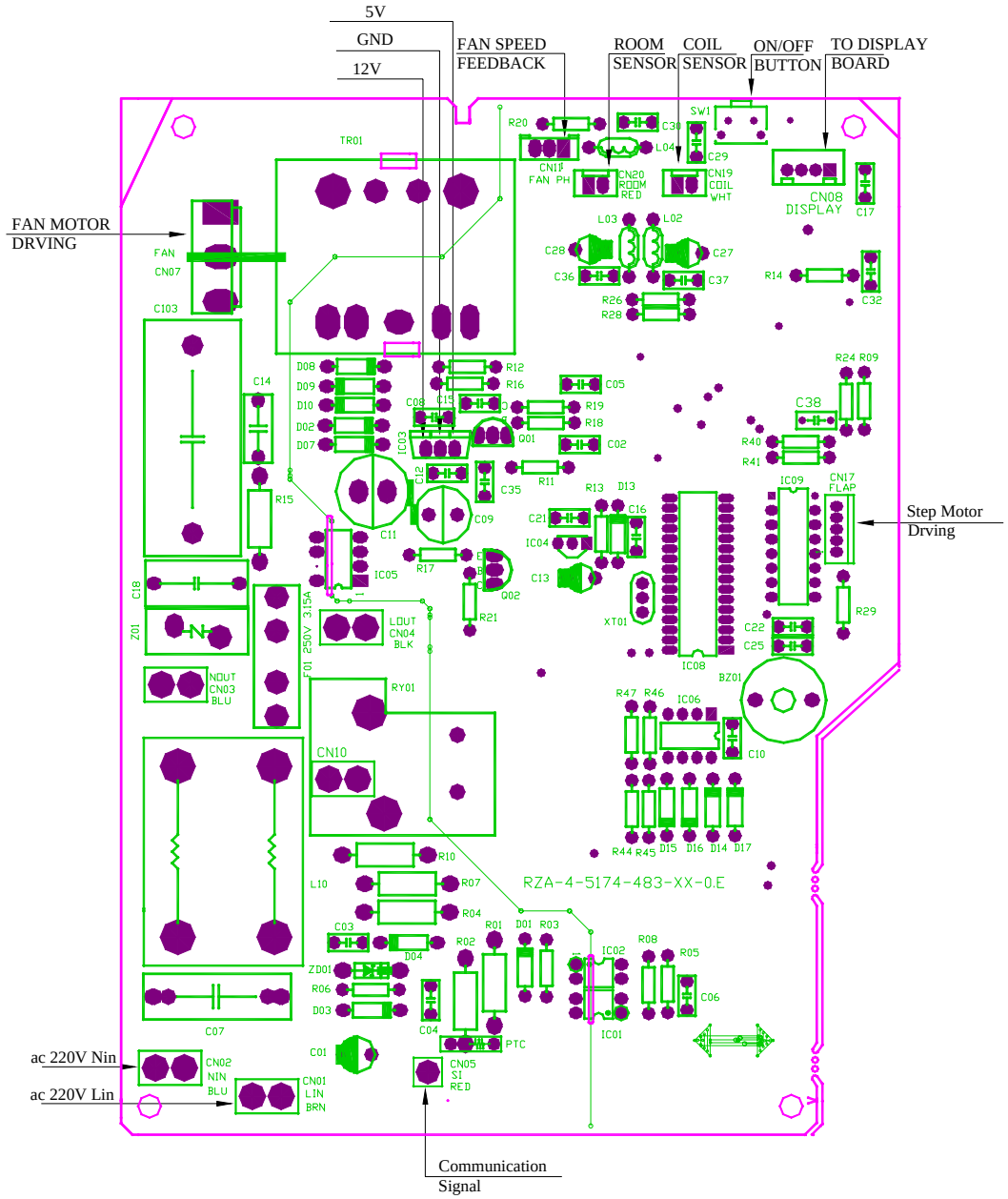
1. Control board for indoor unit

1）AMS-07UR4SNZA3、AMS-09UR4SNZA3、AMS-12UR4SNZA3



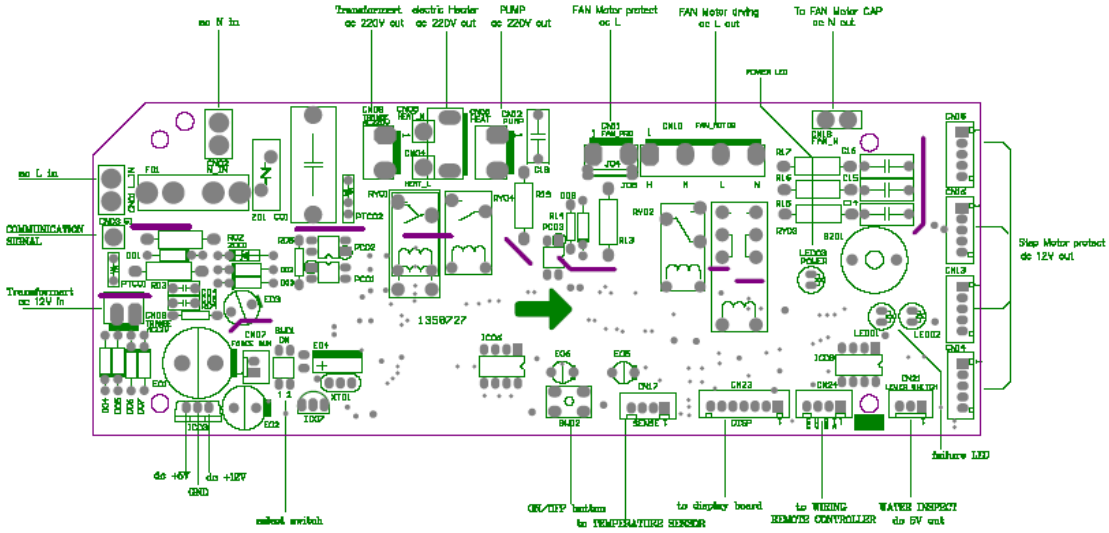
5. ELECTRICAL DATA

2）AMS-18UR4SPZA3



5. ELECTRICAL DATA

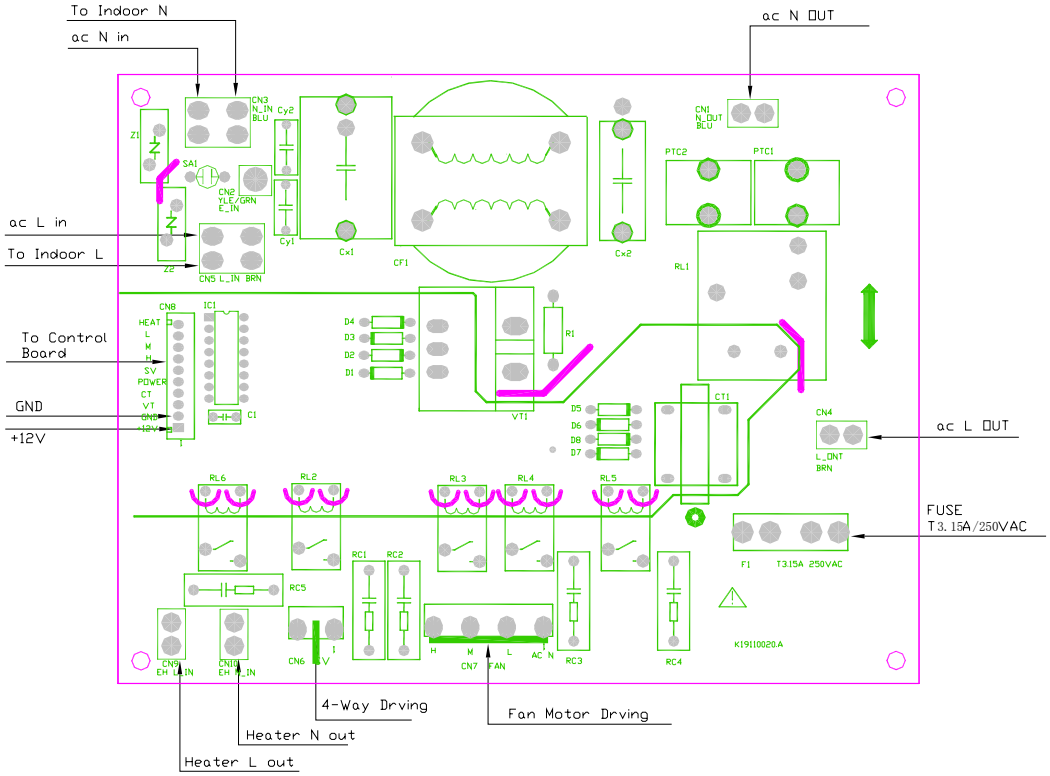
3) AMD-09UX4SJC、AMD-12UX4SJC、AMD-18UX4SJC



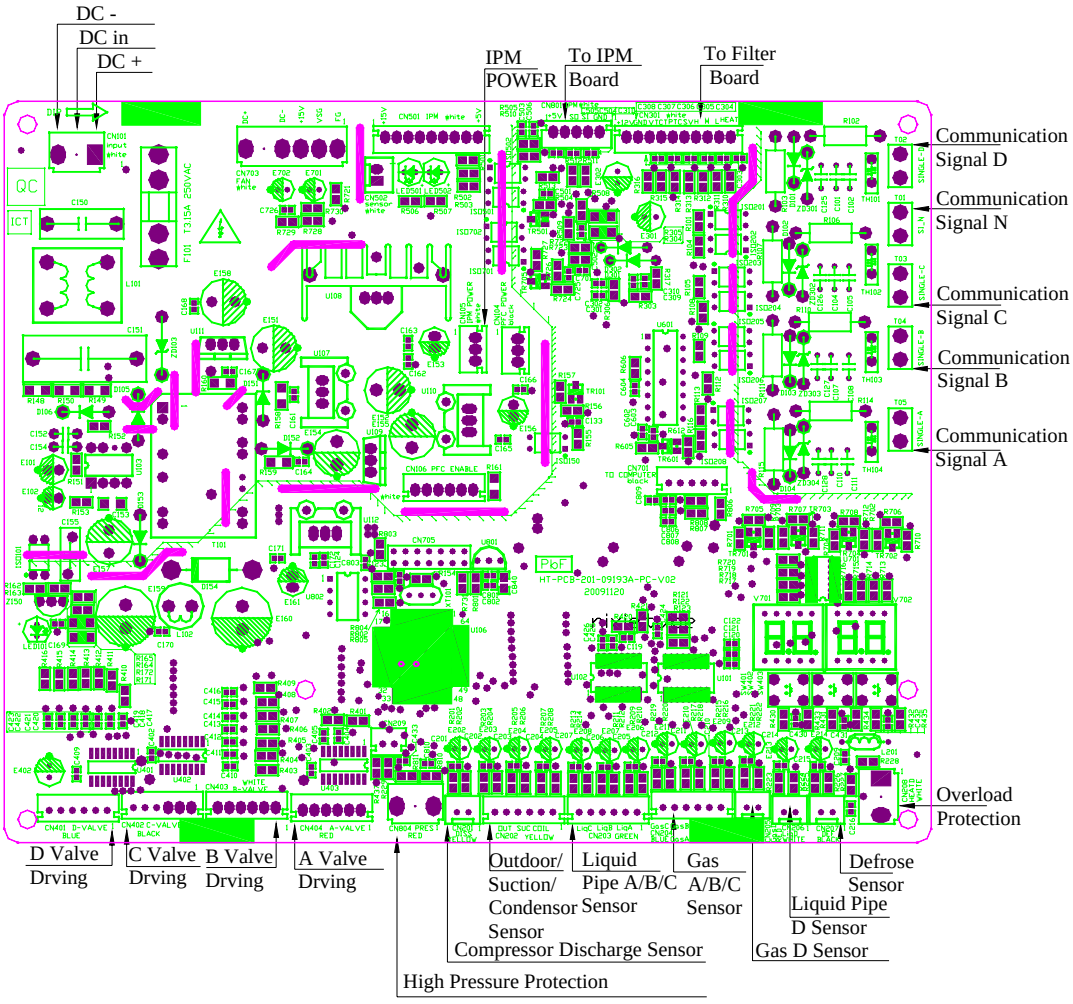
5. ELECTRICAL DATA

2. Control board for outdoor unit（AMW3-24U4SKC、AMW4-28U4SKC）

1）FILTER BOARD

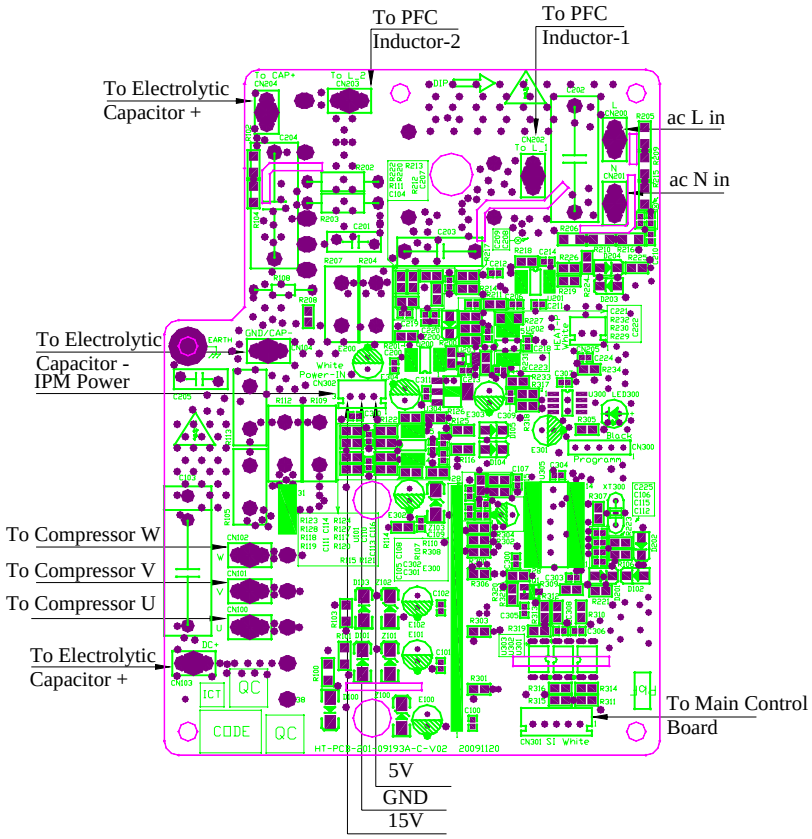


2)CONTROL BOARD



5. ELECTRICAL DATA

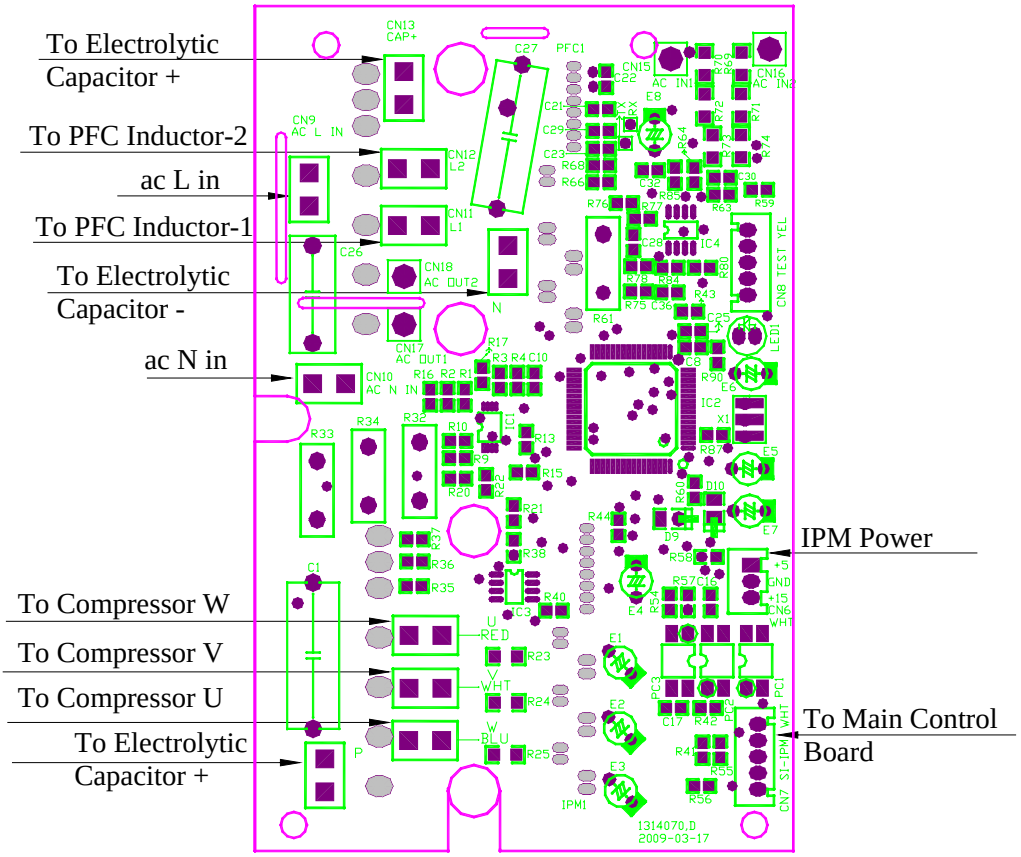
3)IPM Board



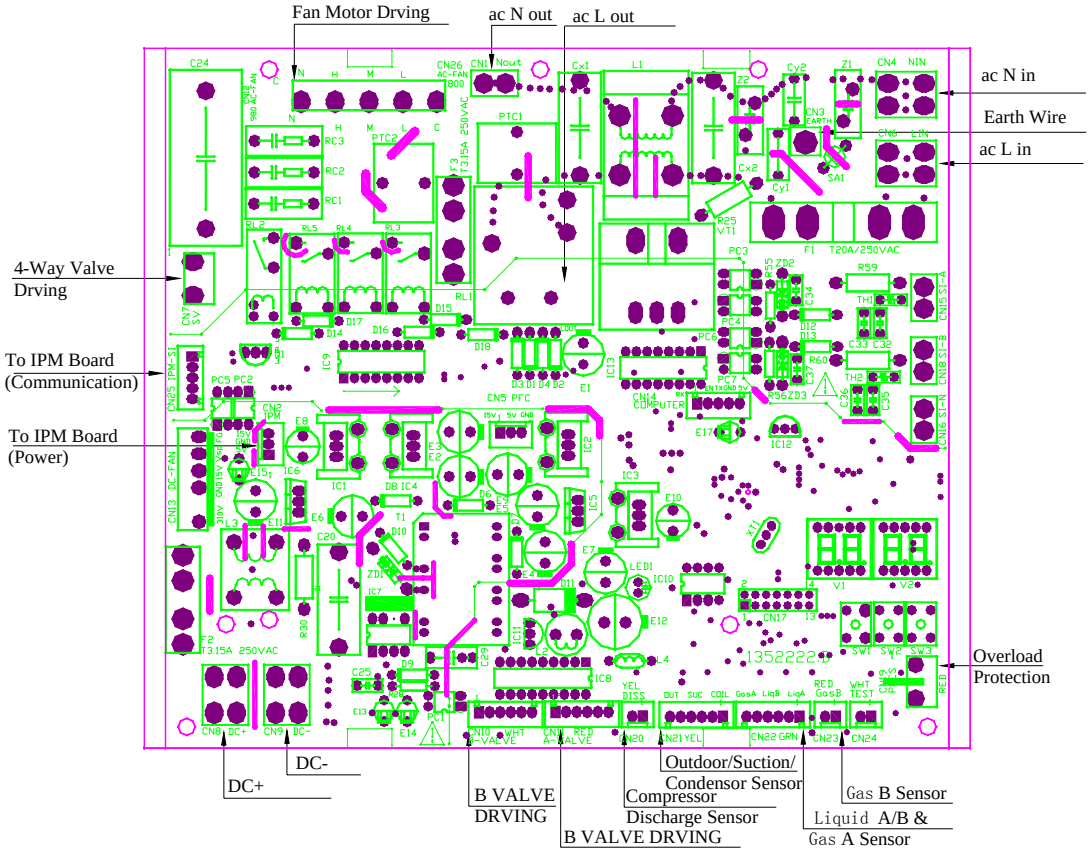
5. ELECTRICAL DATA

3. Control board for outdoor unit（AMW2-16U4SGC　AMW2-20U4SNC）

1）IPM Board



2)CONTROL BOARD



5. ELECTRICAL DATA

5-3. Sensor parameter

1. THE PARAMETER OF OUTDOOR COMPRESSOR TEMPERATURE SENSOR:
（R_0=187.25K±6.3%；R_{100}=3.77K±2.5K；B=3979±1%）

T(℃)	R(KΩ)	V(v)	DEC	HEX	T(℃)	R(KΩ)	V(v)	DEC	HEX	T(℃)	R(KΩ)	V(v)	DEC	HEX
-30	966.1	0.1014	5	5	26	55.46	1.3252	68	44	82	6.662	3.7507	191	BF
-29	910.3	0.1075	5	5	27	53.11	1.3678	70	46	83	6.446	3.7813	193	C1
-28	858	0.1139	6	6	28	50.86	1.4112	72	48	84	6.239	3.8111	194	C2
-27	809	0.1206	6	6	29	48.72	1.4552	74	4A	85	6.039	3.8404	196	C4
-26	763.1	0.1277	7	7	30	46.68	1.4997	76	4C	86	5.846	3.8691	197	C5
-25	720	0.1351	7	7	31	44.74	1.5446	79	4F	87	5.661	3.8970	199	C7
-24	679.6	0.1429	7	7	32	42.89	1.5901	81	51	88	5.482	3.9243	200	C8
-23	641.7	0.1511	8	8	33	41.13	1.6359	83	53	89	5.309	3.9512	202	CA
-22	606.1	0.1597	8	8	34	39.44	1.6824	86	56	90	5.143	3.9773	203	CB
-21	572.7	0.1687	9	9	35	37.84	1.7289	88	58	91	4.982	4.0029	204	CC
-20	541.3	0.1782	9	9	36	36.3	1.7762	91	5B	92	4.827	4.0279	205	CD
-19	511.7	0.1881	10	A	37	34.84	1.8235	93	5E	93	4.678	4.0522	207	CF
-18	484	0.1984	10	A	38	33.44	1.8713	95	5F	94	4.534	4.0760	208	D0
-17	457.9	0.2092	11	B	39	32.11	1.9190	98	62	95	4.395	4.0992	209	D1
-16	433.3	0.2206	11	B	40	30.83	1.9673	100	64	96	4.261	4.1218	210	D2
-15	410.2	0.2325	12	C	41	29.61	2.0157	103	67	97	4.132	4.1439	211	D3
-14	388.5	0.2448	12	C	42	28.45	2.0640	105	69	98	4.007	4.1655	212	D4
-13	368	0.2577	13	D	43	27.34	2.1124	108	6C	99	3.886	4.1866	214	D6
-12	348.7	0.2712	14	E	44	26.27	2.1612	110	6E	100	3.77	4.2070	215	D7
-11	330.5	0.2853	15	F	45	25.25	2.2099	113	71	101	3.658	4.2269	216	D8
-10	313.4	0.2999	15	F	46	24.28	2.2584	115	73	102	3.549	4.2465	217	D9
-9	297.2	0.3153	16	10	47	23.35	2.3068	118	76	103	3.444	4.2655	218	DA
-8	281.9	0.3312	17	11	48	22.46	2.3552	120	78	104	3.343	4.2839	218	DA
-7	267.5	0.3478	18	12	49	21.6	2.4038	123	7B	105	3.15	4.3197	220	DC
-6	253.9	0.3651	19	13	50	20.79	2.4516	125	7D	106	3.059	4.3367	221	DD
-5	241.1	0.3830	20	14	51	20.01	2.4994	127	7F	107	2.97	4.3535	222	DE
-4	229	0.4016	20	14	52	19.26	2.5471	130	82	108	2.884	4.3699	223	DF
-3	217.6	0.4209	21	15	53	18.54	2.5947	132	84	109	2.802	4.3856	224	E0
-2	206.8	0.4409	22	16	54	17.85	2.6420	135	87	110	2.721	4.4012	224	E0
-1	196.6	0.4617	24	17	55	17.19	2.6889	137	89	111	2.721	4.4012	224	E0
0	186.9	0.4833	25	18	56	16.56	2.7352	139	8B	112	2.644	4.4162	225	E1
1	177.8	0.5056	26	19	57	15.96	2.7809	142	8E	113	2.569	4.4309	226	E2
2	169.2	0.5285	27	1A	58	15.38	2.8265	144	90	114	2.496	4.4452	227	E3
3	161	0.5525	28	1B	59	14.82	2.8719	146	92	115	2.426	4.4591	227	E3
4	153.3	0.5770	29	1C	60	14.29	2.9163	149	95	116	2.358	4.4727	228	E4
5	146	0.6024	31	1E	61	13.78	2.9603	151	97	117	2.292	4.4859	229	E5
6	139	0.6289	32	1F	62	13.28	3.0048	153	99	118	2.228	4.4988	229	E5
7	132.5	0.6557	33	21	63	12.81	3.0479	155	9B	119	2.167	4.5112	230	E6
8	126.3	0.6835	35	23	64	12.36	3.0902	158	9E	120	2.107	4.5235	231	E7
9	120.4	0.7123	36	24	65	11.93	3.1319	160	A0	121	2.049	4.5354	231	E7
10	114.8	0.7418	38	26	66	11.51	3.1736	162	A2	122	2.049	4.5354	231	E7
11	109.5	0.7722	39	27	67	11.11	3.2144	164	A4	123	1.994	4.5467	232	E8
12	104.4	0.8039	41	29	68	10.73	3.2541	166	A6	124	1.887	4.5689	233	E9
13	99.66	0.8357	43	2B	69	10.36	3.2938	168	A8	125	1.836	4.5796	234	EA
14	95.13	0.8686	44	2D	70	10	3.3333	170	AA	126	1.787	4.5899	234	EA
15	90.82	0.9024	46	2C	71	9.659	3.3717	172	AC	127	1.739	4.6000	235	EB
16	86.74	0.9369	48	2E	72	9.331	3.4094	174	AE	128	1.693	4.6098	235	EB
17	82.85	0.9723	50	32	73	9.016	3.4464	176	B0	129	1.649	4.6192	236	EC
18	79.16	1.0085	51	33	74	8.712	3.4829	178	B2	130	1.605	4.6286	236	EC
19	75.65	1.0455	53	35	75	8.421	3.5185	179	B3					
20	72.32	1.0832	55	37	76	8.14	3.5537	181	B5					
21	69.15	1.1217	57	39	77	7.869	3.5882	183	B7					
22	66.13	1.1610	59	3B	78	7.609	3.6220	185	B9					
23	63.27	1.2009	61	3D	79	7.359	3.6551	186	BA					
24	60.54	1.2416	63	3F	80	7.118	3.6876	188	BC					
25	57.94	1.2830	65	41	81	6.885	3.7195	190	BE					

5. ELECTRICAL DATA

2. THE PARAMETER OF THE OTHER SENSOR IN INDOOR AND OUTDOOR UNIT:
（R_0=15K±2%；B=3450±2%）

T(℃)	R(KΩ)	V(v)	DEC	HEX	T(℃)	R(KΩ)	V(v)	DEC	HEX	T(℃)	R(KΩ)	V(v)	DEC	HEX
-30	67.94	0.3235	16	10	18	6.962	2.0151	103	67	66	1.297	3.9186	200	C8
-29	64.25	0.3408	17	11	19	6.688	2.0636	105	69	67	1.258	3.9443	201	C9
-28	60.79	0.3588	18	12	20	6.427	2.1120	108	6C	68	1.22	3.9696	202	CA
-27	57.53	0.3776	19	13	21	6.178	2.1603	110	6E	69	1.184	3.9939	204	CC
-26	54.48	0.3971	20	14	22	5.939	2.2089	113	71	70	1.149	4.0178	205	CD
-25	51.6	0.4174	21	15	23	5.712	2.2570	115	73	71	1.116	4.0406	206	CE
-24	48.9	0.4384	22	16	24	5.494	2.3053	118	76	72	1.083	4.0636	207	CF
-23	46.35	0.4603	23	17	25	5.286	2.3533	120	78	73	1.051	4.0862	208	D0
-22	43.96	0.4829	25	19	26	5.086	2.4014	122	7A	74	1.021	4.1077	209	D1
-21	41.7	0.5065	26	1A	27	4.896	2.4489	125	7D	75	0.9914	4.1290	211	D3
-20	39.58	0.5307	27	1B	28	4.714	2.4963	127	7F	76	0.963	4.1497	212	D4
-19	37.58	0.5558	28	1C	29	4.539	2.5436	130	82	77	0.9354	4.1701	213	D5
-18	35.69	0.5818	30	1E	30	4.372	2.5904	132	84	78	0.9088	4.1898	214	D6
-17	33.91	0.6087	31	1F	31	4.212	2.6369	134	86	79	0.8831	4.2091	215	D7
-16	32.23	0.6363	32	20	32	4.059	2.6830	137	89	80	0.8582	4.2280	216	D8
-15	30.65	0.6648	34	22	33	3.912	2.7288	139	8B	81	0.8342	4.2463	217	D9
-14	29.15	0.6942	35	23	34	3.772	2.7738	141	8D	82	0.8109	4.2643	217	D9
-13	27.74	0.7244	37	25	35	3.637	2.8188	144	90	83	0.7884	4.2818	218	DA
-12	26.4	0.7556	39	27	36	3.508	2.8631	146	92	84	0.7666	4.2988	219	DB
-11	25.14	0.7875	40	28	37	3.384	2.9070	148	94	85	0.7455	4.3155	220	DC
-10	23.95	0.8202	42	2A	38	3.265	2.9504	150	96	86	0.725	4.3318	221	DD
-9	22.82	0.8539	44	2C	39	3.151	2.9932	153	99	87	0.7053	4.3476	222	DE
-8	21.75	0.8885	45	2D	40	3.041	3.0358	155	9B	88	0.6861	4.3631	223	DF
-7	20.74	0.9237	47	2F	41	2.936	3.0775	157	9D	89	0.6676	4.3781	223	DF
-6	19.79	0.9596	49	31	42	2.835	3.1188	159	9F	90	0.6496	4.3929	224	E0
-5	18.88	0.9966	51	33	43	2.739	3.1590	161	A1	91	0.6323	4.4071	225	E1
-4	18.02	1.0343	53	35	44	2.646	3.1990	163	A3	92	0.6156	4.4209	225	E1
-3	17.2	1.0731	55	37	45	2.556	3.2387	165	A5	93	0.5993	4.4345	226	E2
-2	16.43	1.1122	57	39	46	2.471	3.2771	167	A7	94	0.5836	4.4477	227	E3
-1	15.7	1.1520	59	3B	47	2.388	3.3155	169	A9	95	0.5683	4.4606	227	E3
0	15	1.1929	61	3D	48	2.309	3.3528	171	AB	96	0.5535	4.4732	228	E4
1	14.34	1.2342	63	3F	49	2.233	3.3896	173	AD	97	0.5391	4.4855	229	E5
2	13.71	1.2765	65	41	50	2.159	3.4262	175	AF	98	0.5251	4.4975	229	E5
3	13.11	1.3195	67	43	51	2.089	3.4615	177	B1	99	0.5115	4.5093	230	E6
4	12.55	1.3623	69	45	52	2.021	3.4965	178	B2	100	0.4983	4.5207	231	E7
5	12.01	1.4063	72	48	53	1.956	3.5306	180	B4	101	0.4855	4.5319	231	E7
6	11.5	1.4506	74	4A	54	1.893	3.5644	182	B6	102	0.4731	4.5427	232	E8
7	11.01	1.4959	76	4C	55	1.832	3.5977	183	B7	103	0.461	4.5534	232	E8
8	10.55	1.5410	79	4F	56	1.774	3.6299	185	B9	104	0.4492	4.5638	233	E9
9	10.1	1.5878	81	51	57	1.718	3.6616	187	BB	105	0.4378	4.5739	233	E9
10	9.684	1.6338	83	53	58	1.664	3.6926	188	BC	106	0.4268	4.5838	234	EA
11	9.284	1.6805	86	56	59	1.612	3.7231	190	BE	107	0.416	4.5934	234	EA
12	8.903	1.7276	88	58	60	1.562	3.7528	191	BF	108	0.4055	4.6029	235	EB
13	8.54	1.7749	91	5B	61	1.513	3.7824	193	C1	109	0.3953	4.6121	235	EB
14	8.194	1.8226	93	5D	62	1.467	3.8106	194	C2	110	0.3854	4.6211	236	EC
15	7.864	1.8704	95	5F	63	1.422	3.8386	196	C4					
16	7.549	1.9185	98	62	64	1.379	3.8658	197	C5					
17	7.249	1.9667	100	64	65	1.337	3.8927	199	C7					

5. ELECTRICAL DATA

3. THE PARAMETER OF THE OTHER SENSOR IN INDOOR AND OUTDOOR UNIT:
（R_{25}=15K±3%；$B_{(25/50)}$=4100±3%）

T(℃)	R(KΩ)	V(v)	DEC	HEX	T(℃)	R(KΩ)	V(v)	DEC	HEX	T(℃)	R(KΩ)	V(v)	DEC	HEX
-20	154.577	0.4423	23	17	28	12.635	2.7139	138	8A	76	1.944	4.4263	226	E2
-19	145.161	0.4683	24	18	29	12.062	2.7714	141	8D	77	1.877	4.4439	227	E3
-18	136.724	0.4943	25	19	30	11.519	2.8282	144	90	78	1.814	4.4606	227	E3
-17	128.835	0.5214	27	1B	31	11.436	2.8370	145	91	79	1.753	4.4768	228	E4
-16	121.455	0.5496	28	1C	32	10.942	2.8911	147	93	80	1.694	4.4926	229	E5
-15	114.548	0.5789	30	1E	33	10.472	2.9444	150	96					
-14	108.080	0.6094	31	1F	34	10.025	2.9970	153	99					
-13	102.020	0.6409	33	21	35	9.6	3.0488	155	9B					
-12	96.341	0.6736	34	22	36	9.196	3.0997	158	9E					
-11	91.017	0.7074	36	24	37	8.811	3.1498	161	A1					
-10	86.022	0.7424	38	26	38	8.444	3.1991	163	A3					
-9	81.334	0.7785	40	28	39	8.095	3.2475	166	A6					
-8	76.933	0.8158	42	2A	40	7.763	3.2948	168	A8					
-7	72.799	0.8542	44	2C	41	7.446	3.3414	170	AA					
-6	68.914	0.8938	46	2E	42	7.144	3.3869	173	AD					
-5	65.262	0.9344	48	30	43	6.856	3.4316	175	AF					
-4	61.828	0.9762	50	32	44	6.581	3.4753	177	B1					
-3	58.597	1.0191	52	34	45	6.319	3.5180	179	B3					
-2	55.555	1.0630	54	36	46	6.069	3.5597	182	B6					
-1	52.691	1.1080	57	39	47	5.83	3.6006	184	B8					
0	49.994	1.1540	59	3B	48	5.602	3.6404	186	BA					
1	47.452	1.2009	61	3D	49	5.385	3.6792	188	BC					
2	45.055	1.2489	64	40	50	5.177	3.7171	190	BE					
3	42.795	1.2977	66	42	51	4.97	3.7556	192	C0					
4	40.663	1.3474	69	45	52	4.773	3.7931	193	C1					
5	38.650	1.3979	71	47	53	4.585	3.8295	195	C3					
6	36.750	1.4493	74	4A	54	4.406	3.8648	197	C5					
7	34.956	1.5013	77	4D	55	4.234	3.8993	199	C7					
8	33.260	1.5541	79	4F	56	4.071	3.9327	201	C9					
9	31.657	1.6075	82	52	57	3.914	3.9653	202	CA					
10	30.142	1.6614	85	55	58	3.765	3.9968	204	CC					
11	28.709	1.7159	88	58	59	3.622	4.0275	205	CD					
12	27.352	1.7709	90	5A	60	3.485	4.0573	207	CF					
13	26.069	1.8262	93	5D	61	3.355	4.0861	208	D0					
14	24.853	1.8819	96	60	62	3.23	4.1141	210	D2					
15	23.702	1.9379	99	63	63	3.11	4.1414	211	D3					
16	22.611	1.9941	102	66	64	2.996	4.1676	213	D5					
17	21.577	2.0505	105	69	65	2.886	4.1932	214	D6					
18	20.597	2.1069	107	6B	66	2.781	4.2180	215	D7					
19	19.667	2.1634	110	6E	67	2.681	4.2418	216	D8					
20	18.785	2.2199	113	71	68	2.584	4.2652	218	DA					
21	17.948	2.2763	116	74	69	2.492	4.2877	219	DB					
22	17.153	2.3326	119	77	70	2.403	4.3096	220	DC					
23	16.398	2.3887	122	7A	71	2.319	4.3305	221	DD					
24	15.681	2.4445	125	7D	72	2.237	4.3511	222	DE					
25	15.000	2.5000	128	80	73	2.159	4.3709	223	DF					
26	14.326	2.5575	130	82	74	2.084	4.3901	224	E0					
27	13.687	2.6144	133	85	75	2.013	4.4084	225	E1					

6. CONTROL MODEL

INDOOR CONTROL MODE（AMS-07UR4SNZA3、AMS-09UR4SNZA3、AMS-12UR4SNZA3、AMS-18UR4SPZA3）

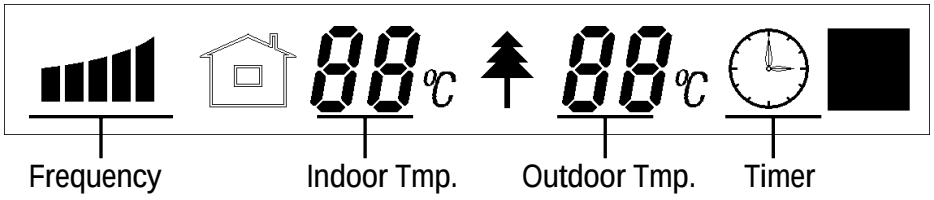
1.Major general technical parameters

1 Conditionings for operation: Ambient temperatures: (-15 - +45 ℃), relative humidity (45 - 85%).
2 Remote receiver distance: 8 m.
3 Remote receiver angle: Less than 80 degrees.
4 Temperature control accuracy: ±1℃.
5 Time error: Less than 1%.
6 The power supply for the air conditioner is a.c 220V～240V, 50Hz, with its fluctuation in the range of (176V – 264 V).

2. Functions of the controller

2.1 Display panel

I. Control functions of the remote controller (See operating and installation manual)
II. Display of the indoor unit
The picture of the display is as follows:



III. Displaying Scheme:
1. Timer: Enabled (the “Clock” sign appears), Cancel (the “Clock” sign disappears)
2. Indoor temperature: the “House” sign goes on. and the value is current temperature of indoor. The range of the value is from “-9” to “35”.
Outdoor temperature: the “House” sign goes on. and the value is current temperature of outdoor. The range of the value is from “-19” to “45”.
“— —” will displayed when communication of indoor unit and outdoor unit abnormal.
3. Frequency: stand for the speed of compressor.
4. Display of error codes:
An error code will displayed when error occurred. You can show the code by push “H.P.” button on remote controller 5 times. The error code will flash for 5 seconds while displayed. The “House” sign goes on and all other signs go off.

3. Control function

3.1 Emergency switch

1. When the machine is turned OFF, by press and hold the emergency switch for 5 seconds, with 3 beeps , the indoor unit would turn to emergency run. In such station, machine would be forced to turn to cooling operation with the indoor fan speed being set at high speed, the flaps sweeping and the air conditioner’s operation is irrelevant with room temperatures.
2. If a remote signal has been received during the emergency run, the machine will operate upon the command of such a remote signal.

6. CONTROL MODEL

3.2 Operator-machine communication

The air conditioner has a thermal sensor to detect room temperatures. Some remote controller is equipped with a thermal sensor (Such remote controller has the function of man-machine communication. For details, refer to the section for the remote controller). In addition, there is a thermal sensor at the indoor air inlet. In the case where the remote controller is equipped with a thermal sensor, the default setting for room temperatures is subject to the detection by the remote controller. The remote controller detects the room temperature once every 20 seconds, and automatically transmits a signal at an interval of 3 minutes or when a change in the room temperature is detected. If the indoor control unit has not received a remote signal for more than 10 minutes, the control function will be automatically switched over to the thermal sensor on the indoor unit.

3.3 Timer function

1. Timer on: When set to start in a time by the remote controller, the air conditioner starts in the timer on condition. When the set time is up, the air conditioner will turn on and operates in the preset conditions after receiving a signal from the remote controller. If the air conditioner has not received a signal from the remote controller when the set time is up, it will automatically start and operate in the preset conditions.
2. Timer off: When set to stop in a set time by the remote controller, the air conditioner will start in the timer off condition. When the set time is up, the air conditioner will turn off after receiving a signal from the remote controller. If the air conditioner has not received a signal from the remote controller when the set time is up, it will turn off automatically.
3. Neither the turning on nor turning off operation will cancel the timer function (Some remote controller has a simple one-hour timer off function and excludes this operation).

3.4 Sleep

1. In the heating, cooling or dehumidifying mode, press the “Sleep” button on the remote controller to start or cancel the sleep function in turn, and at the same time the sleep icon on the display screen will be on or off accordingly.
2. In the heating mode, the set temperature will decrease automatically after the sleep function is started.
3. In the cooling mode, the set temperature will rise aotomatically after the sleep function is started.
4. In default, the setting is to cancel the sleep function. Turning off the unit will also cancel the sleep function.

3.5 High efficient run function

In the heating (except for the cooling-only unit), cooling or dehumidifying mode, it may be set for high efficient run with the indoor fan speed changed to the high efficient fan speed and the compressor operating at the highest frequency as available. If the display screen can display the frequency, the frequency displayed on the screen is up to the maximum. It will restore to the previous run state after 15 minutes operation automatically.

3.9 Cold air prevention

In the heating-run, to prevent the indoor fan from blowing cold air, the indoor fan will stop or run slowly until the coil is warmth.

3.10 Mode interfere

For the reason that all indoor units use one outdoor unit, outdoor unit can only run with same mode(cooling or heating), so, when the mode you set is different from the mode that outdoor is running with, mode interfere occurs. Following shows the mode interfere scene.

	cooling	dry	heating	fan	
cooling	√	√	×	√	√ --- normal
dry	√	√	×	√	× --- mode interfere
heating	×	×	√	×	
fan	√	√	×	√	

Outdoor unit always run with the mode of first indoor unit that turned on. when the setting mode of following indoor unit is interfered with it, 3 beeps would be heard, and the indoor unit interfered with the normal running units would turn off automatically.

6. CONTROL MODEL

Outdoor mode control （AMW3-24U4SKC、AMW4-28U4SKC、AMW2-20U4SNC、AMW2-16U4SGC）

1. Summarization

This direction applies to multi-type and DC variable frequency air conditioner

2. Performance index

1. Voltage scale: 176V～264V，50Hz
2. Storage temperature scale: -40℃～85℃
3. Storage humidity scale: PH30％～PH95％
4. Working temperature:-20℃～85℃
5. accuracy for temperature control： ±0.5℃

3．Control function

Cooling Anti-freeze Protection

To prevent freezing caused by too low temperature of indoor evaporator, the air conditioner will implement real-time detection over the indoor coil temperature. If the indoor coil temperature is too low, the compressor will be prohibited from increasing the frequency or decrease the frequency even shut down automatically

Heating Overload Protection

To prevent system overload caused by excessive pressure in heating operation, the machine will implement real-time detection over the indoor fan-coil temperature:

If the indoor coil temperature grows higher, the compressor will be prohibited from increasing the frequency; If the temperature continues to rise, the compressor will decrease the frequency; If the indoor coil temperature is too high, the compressor will stop working immediately. The compressor then will reboot after the indoor coil temperature reduces.

Cooling Overload Protection

To prevent system overload due to excessive pressure during cooling operation, the machine will implement real-time detection over the outdoor condenser coil temperature:

If the outdoor coil temperature grows higher, the compressor will be prohibited from increasing the frequency; If the temperature continues to rise, the compressor will decrease the frequency; If the outdoor fan-coil temperature is too high, then the compressor will stop working immediately. The compressor will reboot after the outdoor coil temperature reduces.

Discharge Temperature Protection

To prevent working conditions of compressor from deteriorating due to high discharge temperature, the machine will implement real-time detection over the discharge temperature.

If the discharge temperature grows higher, the compressor will be prohibited from increasing the frequency; if the temperature continues to rise, the compressor will decrease the frequency automatically; if the discharge temperature is too high, the compressor will stop working immediately. The compressor will then reboot when the discharge temperature returns to normal condition.

6. CONTROL MODEL

Oil-return Control

When the compressor continues to operate at low frequency, there will be an oil return. The compressor increases the frequency, and thus to return the oil in refrigerate system to the compressor.

Operation Mode

1 Mode Categories

Air conditioning mode is the operation mode set by users through remote controller, four modes are available: cooling, heating, dehumidification, as well as fan mode.

2 Mode conflict

The operating mode of outdoor unit is decided by the operating mode of the indoor unit firstly booted. Indoor unit subsequently booted will firstly determine whether it's own mode is conflict with the outdoor mode. If so, the indoor unit will automatically shut down after three beeps; If there is no conflict, the indoor unit will boot normally. The relationship of mode conflict is as follows:

Driven choice / Active mode	Cooling	Dehumidification	Heating	fan
Cooling	√	√	×	√
Dehumidification	√	√	×	√
Heating	×	×	√	×
fan	√	√	×	√

√———Mode conflict will not happen

×———Mode conflict will happen

Outdoor four-way Valve Control

Four-way valve of the outdoor machine shuts down when cooling but starts when heating. The operation of heating defrosting refers to defrosting operation and, when the heating remote shutdown, the four-way valve disconnects in 50s when the compressor stops working.

Start-up Protection:

To prevent compressor from restart frequently in the condition that system pressure has not been completely balanced, it can't be restarted within 3 minutes.

Pressure Protection:

Pressure switch is normally kept open. When the pressure grows too high, the pressure switch will close and soft will enter pressure protection control. soft will automatically decrease the frequency. If the pressure is still unable to return to normal condition after decreasing frequency, compressor will stop and report the fault code of pressure protection.

6. CONTROL MODEL

Fault code 1:

If the unit reports the following fault code, compressor will stops, and the unit can't be operated until the failure is eliminated:

5	Communication fault with IPM
6	Suction sensor fault
7	Discharge sensor fault
8	Top of the compressor sensor fault
9	Outdoor coil temperature sensor fault
10	Defrosting sensor fault
11	Outdoor temperature sensor fault
12	Liquid pipe sensor on valve A fault
13	Liquid pipe sensor on valve B fault
14	Liquid pipe sensor on valve C fault
15	Liquid pipe sensor on valve D fault
16	Gas pipe sensor on valve A fault
17	Gas pipe sensor on valve B fault
18	Gas pipe sensor on valve C fault
19	Gas pipe sensor on valve D fault
20	Current sensor fault
21	Voltage sensor fault
23	Emergency shutdown for discharge temperature abnormal
24	Emergency shutdown for current abnormal
25	Indoor unit A boot fault for freeze protection
26	Indoor unit B boot fault for freeze protection
27	Indoor unit C boot fault for freeze protection
28	Indoor unit D boot fault for freeze protection
29	Shut down for mode conflict
30	Emergency shutdown for IPM failure
31	Emergency shutdown for cooling overload
32	Emergency shutdown for discharge pressure is too high
33	Indoor ambient temperature sensor fault
34	Indoor coil temperature sensor fault
36	Communication fault with indoor unit
37	Condensate in indoor unit is overflow
38	EEPROM of indoor unit error
39	Indoor fan motor fault
41	Indoor AC zero-crossing detection fault

Fault code 2:

if the unit reports the following fault code, the indoor unit which fault will be seen as shutdown, while other indoor units can operate normally.

1	A Communication Fault
2	B Communication Fault
3	C Communication Fault
4	D Communication Fault
22	EEPROM of outdoor unit fault (the unit will operate in accordance with the default value)
40	Freeze protection or high-temperature protection of indoor unit A.
41	Freeze protection or high-temperature protection of indoor unit B.
42	Freeze protection or high-temperature protection of indoor unit C.
43	Freeze protection or high-temperature protection of indoor unit D.

Limit code:

When compressor run, limited frequency or decreasing frequency code is as follows:

1	Frequency forbid by discharge temperature control
2	Frequency forbid by current control
3	Frequency forbid for coil temperature control of indoor unit A
4	Frequency forbid by coil temperature control of indoor unit B
5	Frequency forbid by coil temperature control of indoor unit C
6	Frequency forbid by coil temperature control of indoor unit D
7	TBD
8	Frequency decrease by discharge temperature control
9	Frequency decrease by current control
10	TBD
11	Frequency decrease by coil temperature control of indoor unit A
12	Frequency decrease by coil temperature control of indoor unit B
13	Frequency decrease by coil temperature control of indoor unit C
14	Frequency decrease by coil temperature control of indoor unit D
15	Frequency decrease by IPM
16	Frequency decrease for outdoor overload in cooling mode.
17	Valve opening-control by DSH(or SSH) control
18	Valve closing-control by DSH(or SSH) control
19	Forbid close valve by DSH(or SSH) control
20	Forbid open valve by DSH(or SSH) control
21	Frequency forbid for cooling overload
22	Frequency forbid by IPM
23	Frequency decrease for discharge pressure is too high.

7. TROUBLE SHOOTING

7-1. Trouble alarm

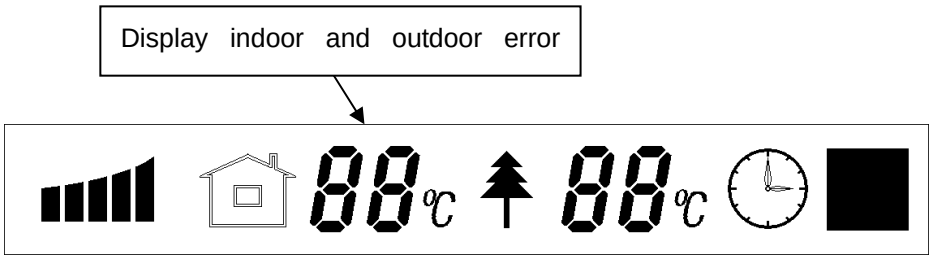
7-1-1.To display error code（AMS-07UR4SNZA3、AMS-09UR4SNZA3、AMS-12UR4SNZA3、AMS-18UR4SPZA3）:

When error occurred, error code can be displayed on the screen of indoor unit through remoter or emergency switch. To display the error code, refer to the following:

Usage1：press “high power” button(or “H.P” button) on remote controller for 5 times.

Usage2：press the emergency switch for over 5 seconds

Indoor or outdoor error codes will be displayed at the displaying area for indoor temperature（“house” area）.



7-1-2 When compressor is stop for some trouble, the trouble code will display on LED screen in outdoor unit. To resolve the trouble, please refer to the following:

Error code	troubles	Possible cause
5	Communication fault with IPM	a) to check the cable between control board and IPM b) IPM fault
6	Suction sensor fault	suction sensor may be short-circuited or disconnected.
7	Discharge sensor fault	discharge sensor may be short-circuited or disconnected.
8	Top of the compressor sensor fault	Top of the compressor sensor may be short-circuited or disconnected.
9	Outdoor coil temperature sensor fault	Coil temperature sensor may be short-circuited or disconnected.
10	Defrosting sensor fault	Defrosting sensor may be short-circuited or disconnected.
11	Outdoor temperature sensor fault	Outdoor temperature sensor may be short-circuited or disconnected.
12	Liquid pipe sensor on valve A fault	a) Liquid pipe sensor may be short-circuited or open-circuited or disconnected. b) The control board in outdoor unit is in trouble
13	Liquid pipe sensor on valve B fault	
14	Liquid pipe sensor on valve C fault	
15	Liquid pipe sensor on valve D fault	
16	Gas pipe sensor on valve A fault	a) Gas pipe sensor may be short-circuited or open-circuited or disconnected. b) The control board in outdoor unit is in trouble
17	Gas pipe sensor on valve A fault	
18	Gas pipe sensor on valve A fault	
19	Gas pipe sensor on valve A fault	
20	Current sensor fault	The outdoor PCB board in trouble.
21	Voltage sensor fault	The outdoor PCB board in trouble.
23	Emergency shutdown for discharge	c) check discharge sensor

	temperature overheat.	d) check whether the strainer before expand valve is blocked. e) Freon is leaking.
24	Emergency shutdown for current overload.	a) Normal protection b) The outdoor board in trouble.
25	Indoor unit A boot fault for freeze protection	a) Expand valve A is damaged (leaking). b) The coil temperature sensor in indoor unit A is fault.
26	Indoor unit B boot fault for freeze protection	a) Expand valve B is damaged (leaking). b) The coil temperature sensor in indoor unit B is fault.
27	Indoor unit C boot fault for freeze protection	a) Expand valve C is damaged (leaking). b) The coil temperature sensor in indoor unit C is fault.
28	Indoor unit D boot fault for freeze protection	a) Expand valve D is damaged (leaking). b) The coil temperature sensor in indoor unit D is fault.
30	Emergency shutdown for IPM failure	a) Normal protection for compressor's overload. b) IPM board is fault.
31	Emergency shutdown for cooling overload.	a) Normal protection for coil temperature sensor in outdoor is too high. b) Coil temperature sensor in outdoor is fault. c) Freon system may be abnormal if this fault is occur frequently
32	Emergency shutdown for discharge pressure is too high	a) The fan inlet of outdoor is blocked in cooling mode. b) The fan inlet of indoor unit is blocked in heating mode. c) Freon system may be blocked d) The surroundings temperature of indoor or outdoor unit is too high.

8. CHECKING COMPONENTS

8-1. Check refrigerant system

TEST SYSTEM FLOW

Conditions: ① Compressor is running.

② The air condition should be installed in good ventilation.

Tool: Pressure Gauge

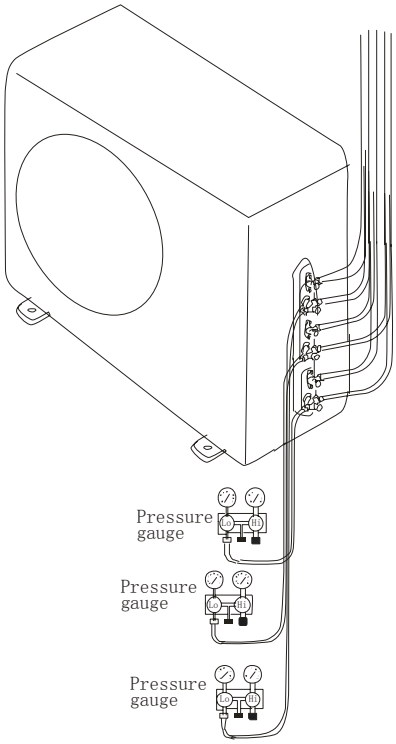
Technique: ① see ② feel ③ test

SEE ----- Tube defrost.

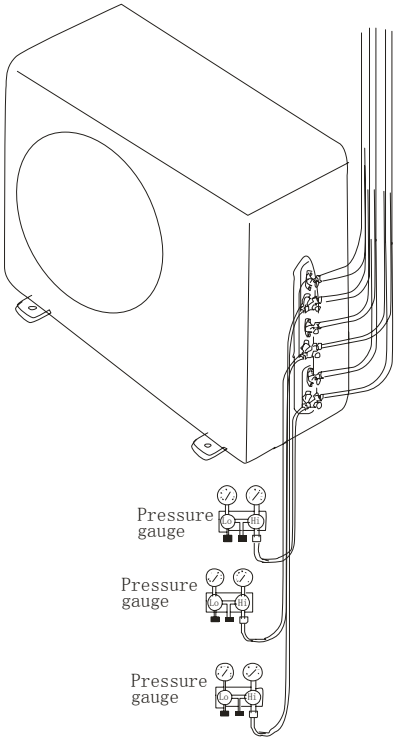
FEEL ----- The difference between tube's temperature.

TEST ----- Test pressure.

cooling run

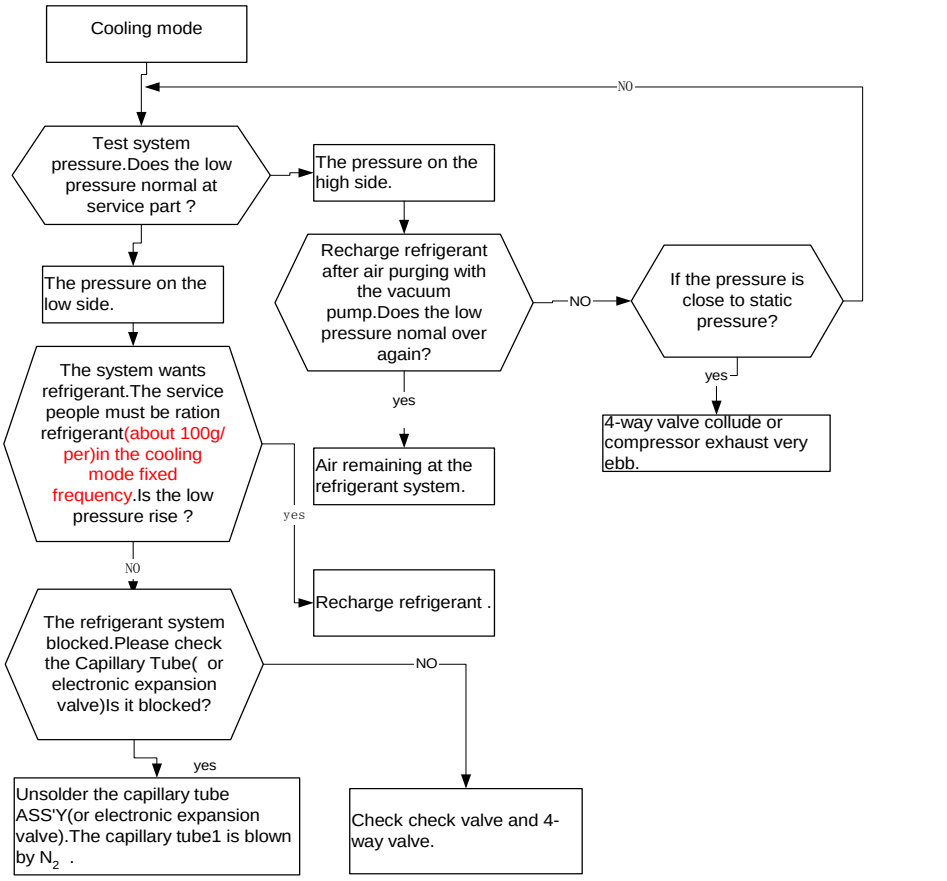


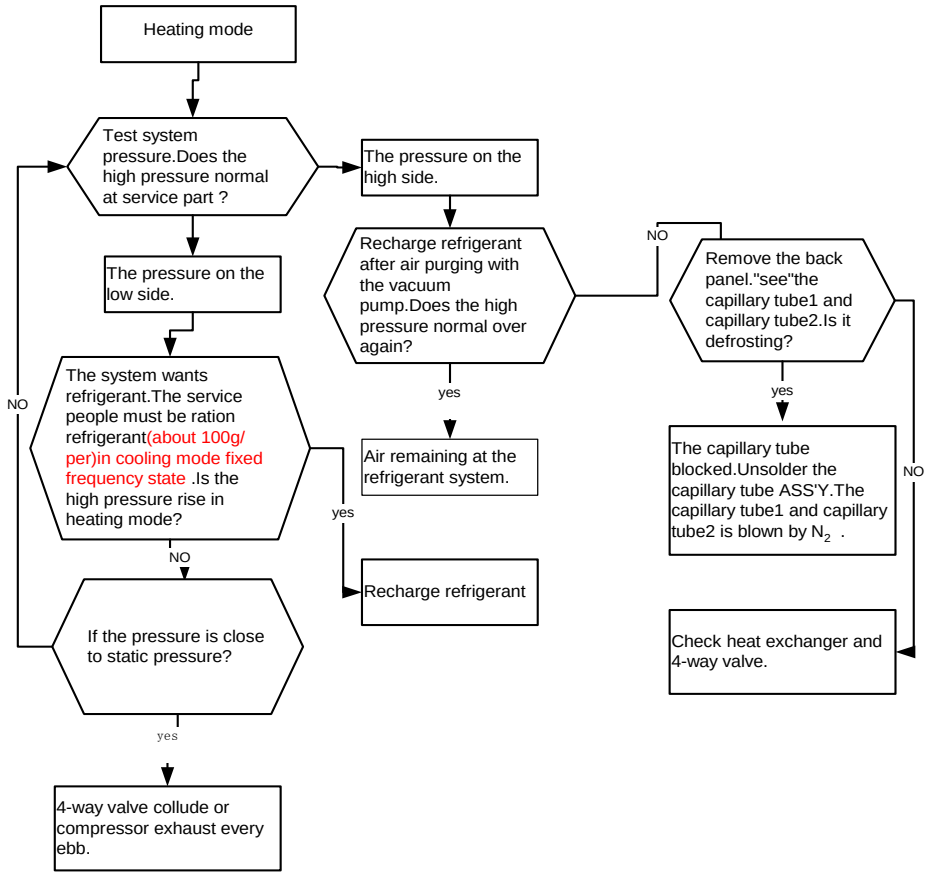
heating run



8. CHECKING COMPONENTS

Test system flow


Cooling mode
NO
Test system pressure.Does the low pressure normal at service part ?
The pressure on the high side.
The pressure on the low side.
Recharge refrigerant after air purging with the vacuum pump.Does the low pressure nomal over again?
NO
If the pressure is close to static pressure?
yes
4-way valve collude or compressor exhaust very ebb.
yes
Air remaining at the refrigerant system.
The system wants refrigerant.The service people must be ration refrigerant(about 100g/ per)in the cooling mode fixed frequency.Is the low pressure rise ?
yes
Recharge refrigerant .
NO
The refrigerant system blocked.Please check the Capillary Tube(or electronic expansion valve)Is it blocked?
NO
yes
Unsolder the capillary tube ASS'Y(or electronic expansion valve).The capillary tube1 is blown by N_2 .
Check check valve and 4-way valve.


Heating mode
Test system pressure.Does the high pressure normal at service part ?
The pressure on the high side.
The pressure on the low side.
Recharge refrigerant after air purging with the vacuum pump.Does the high pressure normal over again?
NO
Remove the back panel."see"the capillary tube1 and capillary tube2.Is it defrosting?
yes
The capillary tube blocked.Unsolder the capillary tube ASS'Y.The capillary tube1 and capillary tube2 is blown by N_2 .
NO
Check heat exchanger and 4-way valve.
yes
Air remaining at the refrigerant system.
The system wants refrigerant.The service people must be ration refrigerant(about 100g/ per)in cooling mode fixed frequency state .Is the high pressure rise in heating mode?
NO
yes
Recharge refrigerant
NO
If the pressure is close to static pressure?
yes
4-way valve collude or compressor exhaust every ebb.

8. CHECKING COMPONENTS

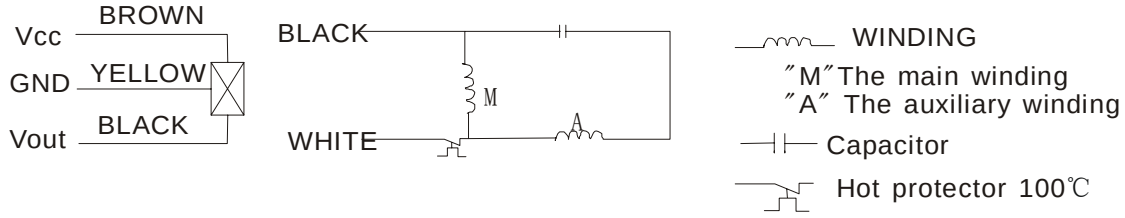
8-2.Check parts unit

1. INDOOR FAN MOTOR

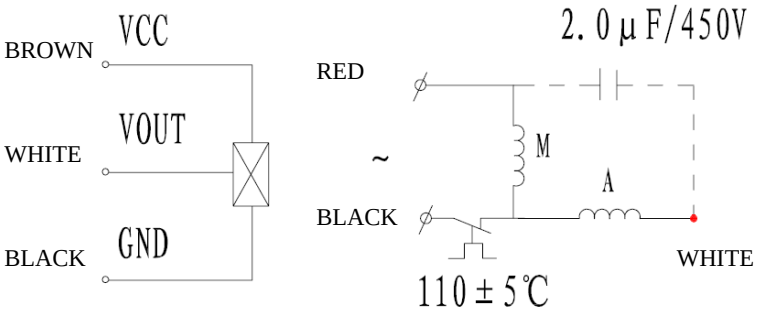
.MOTOR EXAMINE AND REPAIR

Circuit diagram：

1）YYW16-4-532：



2）YYW28-4-2085



Test in resistance.

TOOL: Multimeter.

Test the resistance of the main winding. The indoor fan motor is fault if the resistance of main winding 0(short circuit)or∞（open circuit）.

Test in voltage

TOOL: Multimeter.

Insert screwdriver into to rotate indoor fan motor slowly for 1 revolution or over, and measure voltage “YELLOW” and “GND” on motor. The voltage repeat 0V DC and 5V DC.

Notes:

1) Please don’t hold motor by lead wires.
2) Please don’t plug IN/OUT the motor connecter while power ON.
3) Please don’t drop hurl or dump motor against hard material. Malfunction may not be observed at early stage after such shock. But it may be found later, this type of mishandling void our warranty.

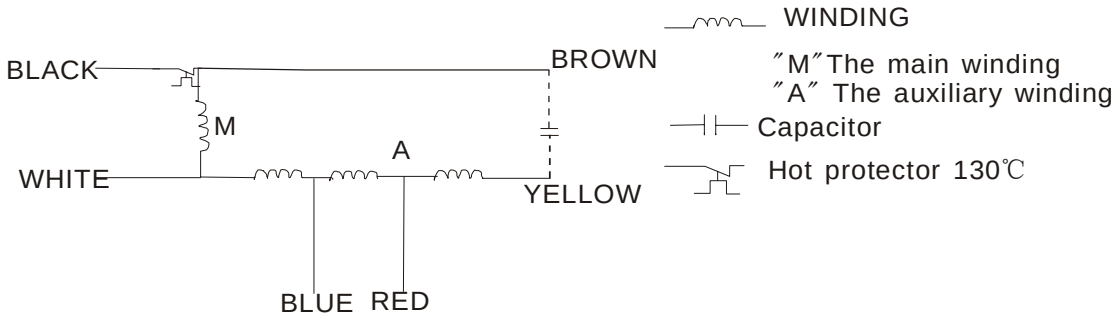
2. OUTDOOR FAN MOTOR

MOTOR EXAMINE AND REPAIR

Circuit diagram

1) YDK70-6H-3:

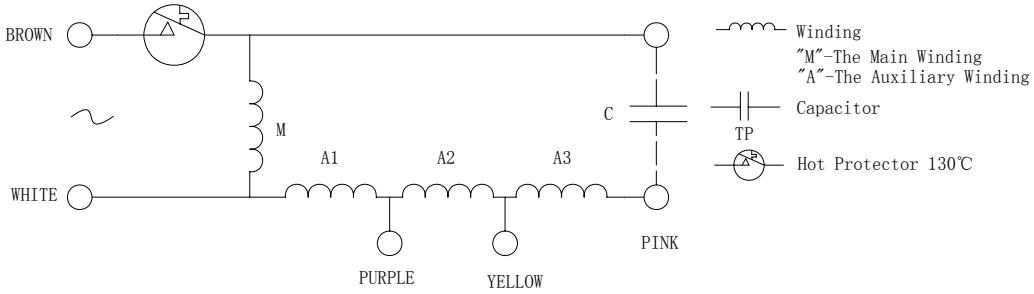
8. CHECKING COMPONENTS



Winding resistance (at 20℃)

M: 78Ω A: 80Ω

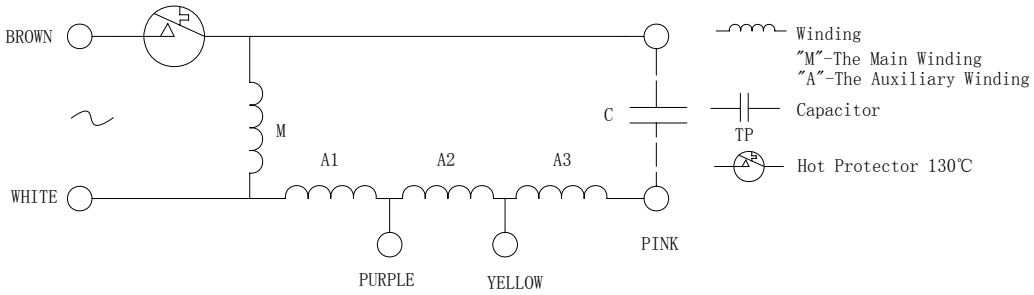
2) YDK55-6I-8:



Winding resistance (at 20℃)

M: 185Ω A: 200Ω

3) YDK29-6I-22:



Winding resistance (at 20℃)

M: 283.5Ω A: 180Ω

Test in resistance.

TOOL: Multimeter.

Test the resistance of the main winding. The outdoor fan motor is fault if the resistance of main winding 0(short circuit)or∞（open circuit）.

Notes:

1) Please don't hold motor by lead wires.

2）Please don't plug IN/OUT the motor connecter while power ON.

3）Please don't drop hurl or dump motor against hard material. Malfunction may not be observed at early stage after such shock. But it may be found later, this type of mishandling void our warranty.

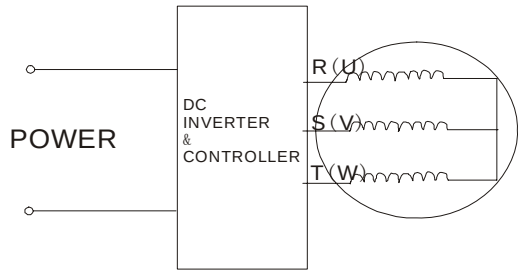
8. CHECKING COMPONENTS

3. COMPRESSOR

Coil Resistance(JUS1015D5，at 25℃): 0.66Ω(U-V), 0.66Ω(V-W), 0.64Ω(W-U)

Coil Resistance(SNB130FGYM，at 20℃): 0.58Ω(U-V), 0.58Ω(V-W), 0.58Ω(W-U)

COMPRESSOR EXAMINE AND REPAIR



Test in resistance.

TOOL: Multimeter.

Test the resistance of the winding. The compressor is fault if the resistance of winding 0(short circuit)or∞（open circuit）

Familiar error:

1）Compressor motor lock.

2）Discharge pressure value approaches static pressure value .

3）Compressor motor winding abnormality.

Notes：

1）Don’t put a compressor on its side or turn over.

2) Please assembly the compressor in your air conditioner rapidly after removing the plugs. Don’t place the comp. In air for along time.

3）Avoiding compressor running in reverse caused by connecting electrical wire incorrectly.

4）Warning! In case AC voltage is impressed to compressor, the compressor performance will below because of its rotor magnetic force decreasing.

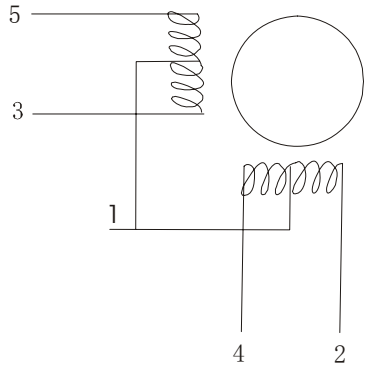
4. INDUCTANCE

Familiar error:

1）Sound abnormality

2）Insulation resistance disqualification.

5. STEP MOTOR



Test in resistance.

TOOL: Multimeter.

Test the resistance of winding. The stepper motor is fault if the resistance of winding 0(short

circuit)or∞（open circuit）.

6. FUSE

Checking continuity of fuse on PCB ASS'Y.

1) Remove the PCB ASS'Y from the electrical component box. Then pull out the fuse from the PCB ASS'Y (Fig.1)

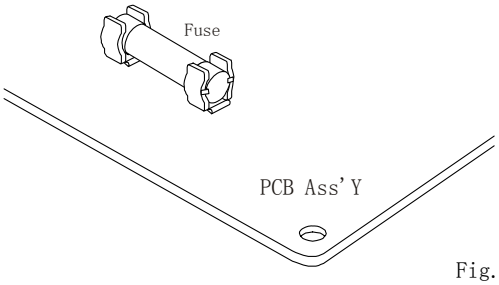


Fig. 1

2) Check for continuity by a multimeter as shown in Fig.2.

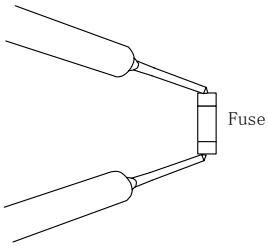


Fig. 2

7.CAPACITOR

1) Remove the lead wires from the capacitor terminals, and then place a probe on the capacitor terminals as shown in Fig.3.
2) Observe the deflection of the pointer, setting the resistance measuring range of the multimeter to the maximum value.

* The capacitor is "good" if the pointer bounces to a great extent and then gradually returns to its original position.

* The range of deflection and deflection time differ according to the capacity of the capacitor.

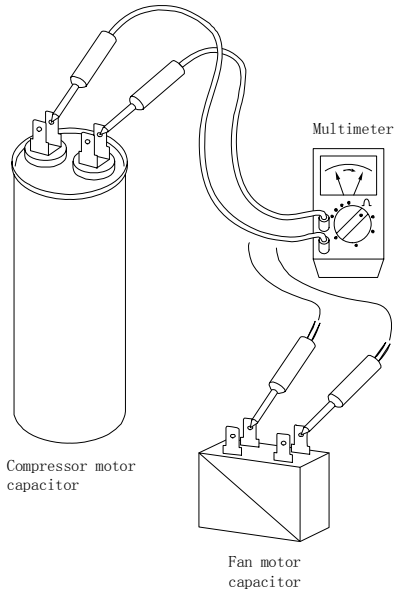
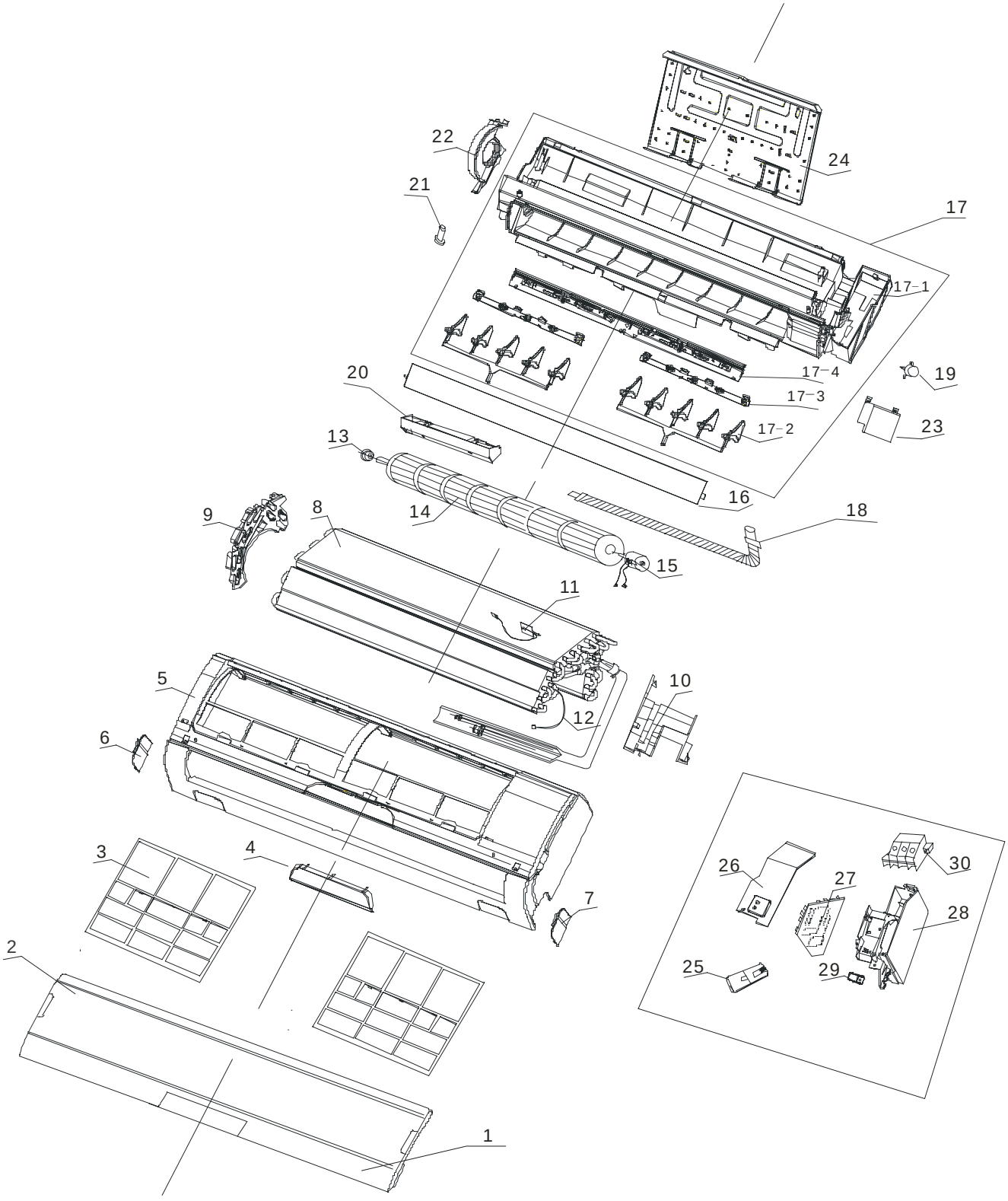


Fig. 3

9. PARTS LIST

9-1. Indoor（AMS-07UR4SNZA3、AMS-09UR4SNZA3、AMS-12UR4SNZA3）

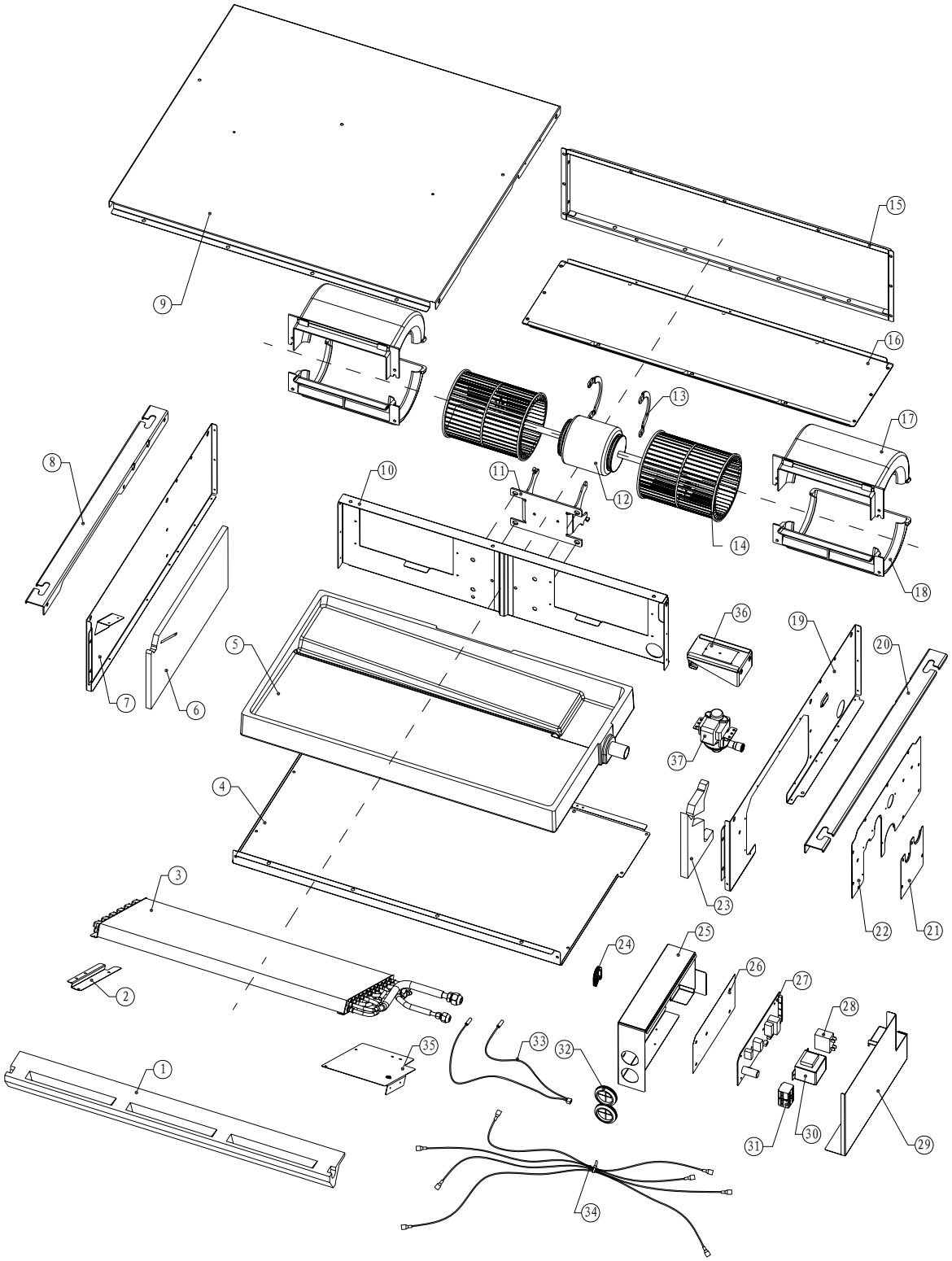


9. PARTS LIST

KEY NO.	PART CODE	PART NO.	DESCRIPTION	Q'TY	NOTE
1	1302820	RZA-2-1503-031-02-0	ORNAMENT	1	
2	1203298	RZA-2-1601-086-XX-0	FRONT PANEL	1	
3	1203547	RZA-0-2307-006-XX-0	AIR FILTER ASS'Y	2	
4	1203444	RZA-2-2258-062-XX-1	DISPLAY PANEL	1	
5	1203267	RZA-2-1501-053-XX-0	GRILL	1	
6	1203645	RZA-2-2369-067-XX-0	LEFT DOWN COVER	1	
7	1203646	RZA-2-2369-068-XX-0	RIGHT DOWN COVER	1	
8	1301490	RZA-0-0051-011-XX-0	EVAPORATOR ASS'Y	1	
9	1203331	RZA-2-2219-043-XX-0	EVAPORATOR BRACKET	1	
10	1203664	RZA-2-2514-113-XX-0	MOTOR COVER	1	
11	1201217	RZA-0-5259-093-XX-0	INDOOR SENSOR ASS'Y	1	
12	1205017	4-5259-332-03-0	COIL SENSOR ASS'Y	1	
13	1203072	RZA-0-2510-106-XX-1	BEARING ASS'Y	1	
14	1203663	RZA-2-2509-123-XX-0	CROSS-FLOW FAN ASS'Y	1	
15	1200849	RZA-0-0000-116-XX-0	FAN MOTOR ASS'Y	1	
16	1203287	RZA-2-1523-056-XX-0	FLAP	1	
17	1203747	RZA-0-2201-129-01-0	BASE ASS'Y	1	
17-1	1203271	RZA-2-2231-012-01-0	BASE	1	
17-2	1203609	RZA-2-1519-037-01-0	BLADE	2	
17-3	1203661	RZA-2-2478-112-XX-0	FLAP FIXED PLATE	2	
17-4	1203627	RZA-2-2360-004-XX-0	INNER FLAP	1	
18	1202992	RZA-0-1303-102-XX-0	DRAINAGE HOSE ASS'Y	1	
19	1200855	RZA-0-0000-144-XX-0	STEPPER MOTOR	1	
20	1200177	RZA-0-5152-062-XX-0	DISPLAY BOARD ASS'Y	1	
21	1203590	RZA-2-2348-005-XX-0	DRAINAGE PLUG	1	
22	1204031	RZA-2-2514-112-XX-0	BEARING COVER	1	
23	1203639	RZA-2-2362-032-XX-0	FIXED BOARD	1	
24	1203356	RZA-2-2230-114-XX-0	INSTALLATION PLATE	1	
25	1380530	K36210260	REMOTE CONTROLLER	1	
26	1203207	RZA-0-5315-023-XX-0	ELECTRICAL CONTROL BOX COVER	1	
27	1380560	K36412212	PCB BOARD ASS'Y	1	AMS-07UR4SNZA3 AMS-09UR4SNZA3
	1380576	K36412213			AMS-12UR4SNZA3
28	1203964	RZA-2-5307-051-01-1	ELECTRICAL CONTROL BOX	1	
29	1203961	RZA-2-5304-016-01-2	CLIP	1	
30	1304376	4-2379-123-02-0	TERMINAL BOARD ASS'Y	1	

9. PARTS LIST

9-4. Indoor （AMD-09UX4SJC/AMD-12UX4SJC/AMD-18UX4SJC）



9. PARTS LIST

KEY NO.	PART CODE	PART NO.	DESCRIPTION	Q'TY	NOTE
1	1360499	K33AD0058	OUTLET FOAM	1	
2	1360552	K33130037	STRENGTHEN PLATE	1	
3	1360605	K37320195	EVAPORATOR	1	AMD-09UX4SJC AMD-12UX4SJC
	1379028	K37320219		1	AMD-18UX4SJC
4	1360786	K31710020	UPPER BOARD	1	
5	1360942	K33450017	SPACER	1	
6	1360670	K33AD0060	FOAM	1	
7	1360677	K31220094	SIDE PANEL	1	
8	1360763	K33170068	CONNECTING PLATE	1	
9	1360484	K31120120	BASE PARTS	1	
10	1360719	K33160040	MOUNTING PLATE ASSY	1	
11	1360729	K331F0046	MOTOR BRACKET	1	
12	1362138	K1B310196	MOTOR	1	AMD-09UX4SJC AMD-12UX4SJC
	1380538	K1B310248		1	AMD-18UX4SJC
13	1360737	K34340017	CARD HOOK	2	
14	1360739	K38210035	CENTRIFUGAL FAN	2	
15	1360830	K31640038	AIR INLET PARTS	1	
16	1354576	K31710019	UPPER BOARD	1	
17	1360744	K38530022	FAN SNAIL SHELL	2	
18	1360745	K38530023	FAN SNAIL SHELL	2	
19	1360629	K31210037	SIDE PANEL PARTS	1	
20	1360760	K33170067	CONNECTING PLATE	1	
21	1360831	K338A0216	COVER	1	
22	1361036	K31220095	SIDE PANEL	1	
23	1360633	K33A40513	SPONGE	1	
24	1202700	RZA-2-2295-001-01-0	CLAMP	1	
25	1360771	K33540055	ELECTRICAL BOX	1	
26	1361768	K33650021	SEPTA	1	
27	1378275	K36412188	PCB BOARD	1	AMD-09UX4SJC
	1362146	K36412043		1	AMD-12UX4SJC
	1380540	K36412211		1	AMD-18UX4SJC
28	1225513	141111	FAN MOTOR CAPACITOR	1	
29	1360766	K33840029	ELEC JOINT BOX COVER	1	
30	1313577	K13530006	TRANSFORMER	1	
31	1359593	K36E10045	TERMINAL BOARD ASS'Y	1	
32	1302207	RZA-2-2397-009-XX-0	RUBBER LID	2	

9. PARTS LIST

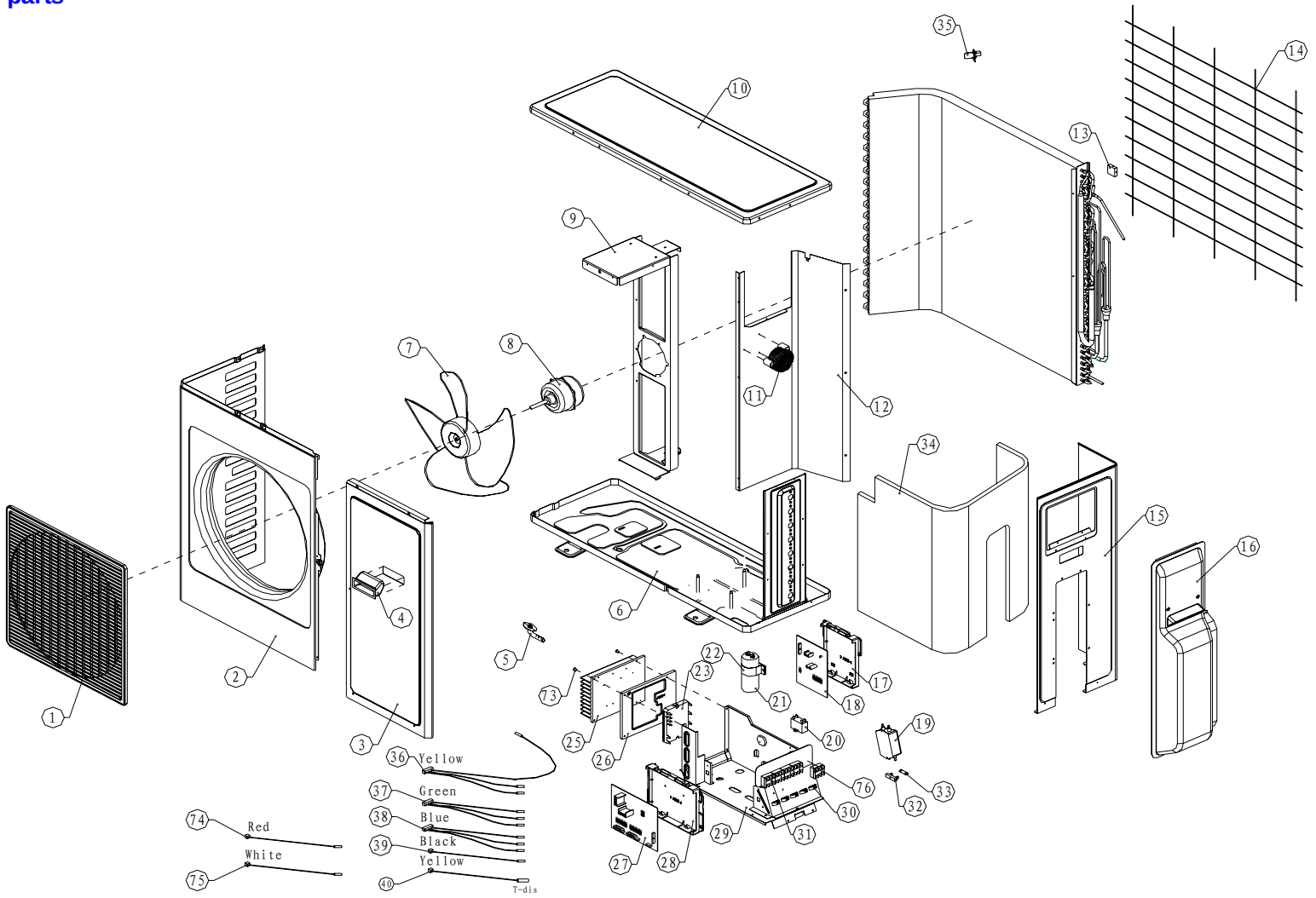
33	1363753	DG19R1-21	TEMPERATURE SENSOR	1	
34	1262330	KT21J6-30(D)	CONNECTING WIRE	1	AMD-09UX4SJC
	1262396	KT21P5-20		1	AMD-12UX4SJC
	1262444	KT21P6-54		1	AMD-18UX4SJC
35	1360539	K33130036	STRENGTHEN PLATE	1	
36	1381967	K33160044	MOUNTING BRACKET FOR PUMP	1	Selection part
37	1382293	K1B410005	CONDENSATE PUMP	1	Selection part

9. PARTS LIST

9-2. Outdoor （AMW3-24U4SKC、AMW4-28U4SKC）

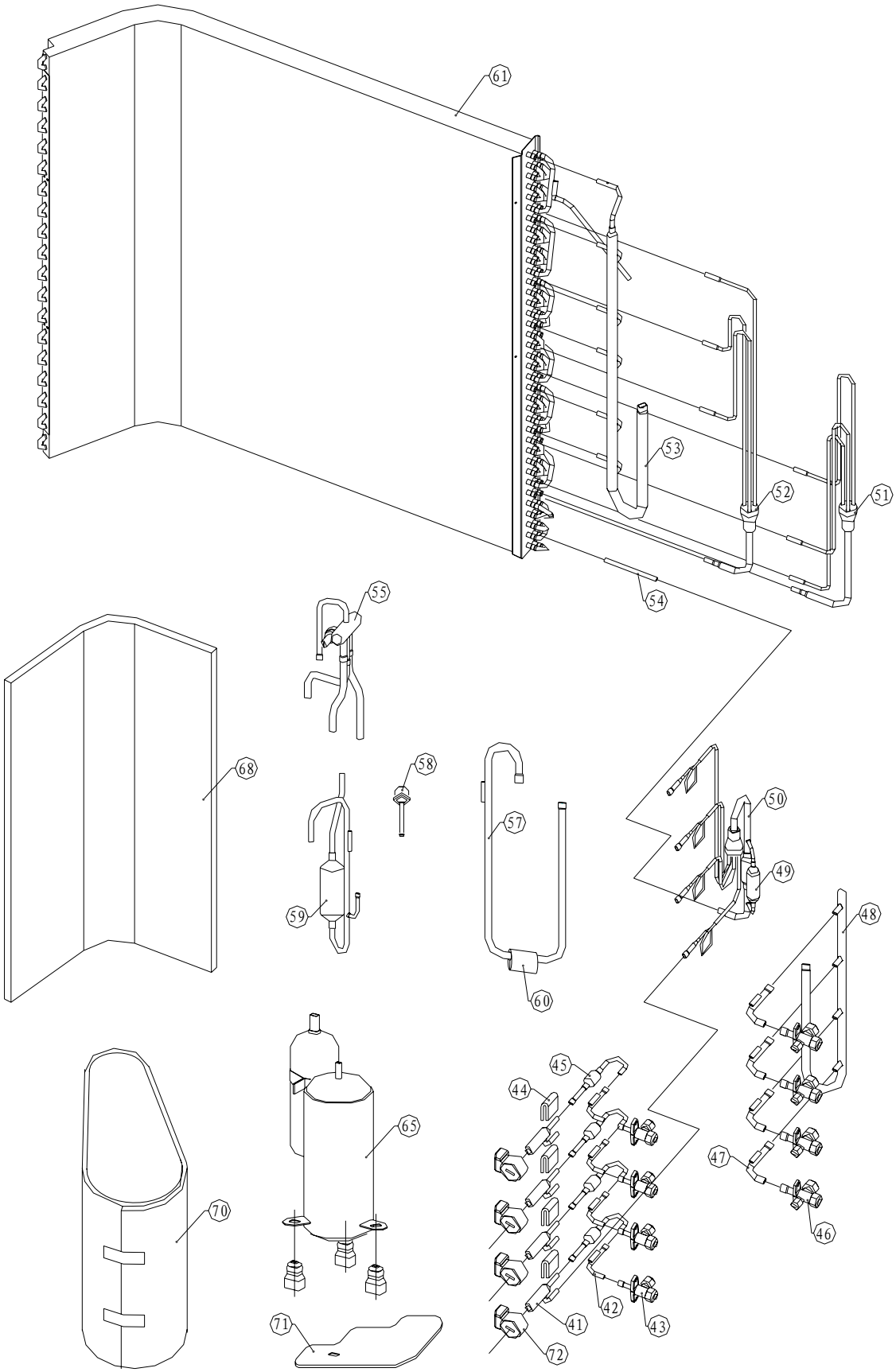
9-2-1. Parts

1. Configuration parts



9. PARTS LIST

2. System parts



9. PARTS LIST

9-2-2. List

KEY NO.	PART CODE	PART NO.	DESCRIPTION	Q'TY	NOTE
1	1202500	RZA-0-1321-003-XX-0	FAN GUARD ASSY	1	
2	1202383	RZA-2-1112-004-XX-0	FRONT PANEL	1	AMW3-24U4SKB
	1312026	K31470022			AMW4-28U4SKB
3	1202381	RZA-0-1112-005-XX-0	RIGHT PANEL ASSY	1	
4	1202703	RZA-2-2303-001-XX-0	HANDLE	2	
5	1202610	RZA-2-2228-002-XX-0	DRAINAGE HOSE	1	
6	1353088	K31120103	BASE ASSY	1	AMW3-24U4SKB
	1353043	K31120099		1	AMW4-28U4SKB
7	1328932	T-2-2502-033-XX-0	PROPELLER FAN	1	
8	1301883	RZA-0-0000-057-XX-1	FAN MOTOR ASSY	1	
9	1202442	RZA-0-2506-003-XX-1	FAN SUPPORTER ASSY	1	
10	1202474	RZA-0-2309-012-XX-0	TOP COVER ASSY	1	
11	1302261	RZA-4-2649-069-XX-0	REACTOR	1	
12	1335623	K33660021	PARTITION SUPPORT PLATE	1	
13	1202234	RZA-2-2431-005-XX-0	RUBBER BLOCK	1	
14	1204976	RZA-0-1111-001-XX-2	BACK GUARD ASSY	1	
15	1301634	RZA-0-1115-001-XX-0	SIDE PANEL ASSY	1	
16	8001840	RZA-2-2369-137-XX-0	VALVE COVER	1	
17	8001549	RZA-2-5307-148-XX-0	ELECTRICAL BOX	1	
18	1377855	K364A0012	FILTER BOARD	1	
19	1317464	K13410005	FILTER	1	
20	1202889	RZA-0-2239-023-XX-0	FAN MOTOR CAPACITOR	1	
21	1304655	RZA-4-2239-090-XX-0	AL ELECTROANALYSIS CAPACITOR	1	
22	1202283	RZA-2-5301-002-XX-0	CAPACITORY CLIP	1	
23	1354460	K36470112	DUMMY	1	
25	1356881	K33AE0021	RADIATOR	1	
26	8006825	K33530023	ELECTRICAL BOX	1	
27	1354436	K36411951	CONTROL BOARD	1	AMW3-24U4SKC
	1354439	K36411952		1	AMW4-28U4SKC
28	8001822	RZA-2-5307-147-XX-0	ELECTRICAL BOX	1	
29	1356966	K33120022	MOUNT PLATE ASSY	1	
30	1206639	RZA-2-9030-012-XX-0	CLIP	5**	
31	1301881	4-2379-123-03-0	TERMINAL PANEL	4*	
32	1200212	RZA-0-2216-002-XX-0	FUSE BRACKET	1	
33	1200211	RZA-0-2349-007-XX-0	FUSE	1	
34	1311469	K33AB0005	NOISE DEFENING COVER	1	
35	1204958	RZA-2-5303-054-XX-0	SENSOR MOUNT	1	

9. PARTS LIST

36	1301839	4-5259-390-04-0	TEMPERATYRE SENSOR	1	
37	1301832	4-5259-390-02-0	TEMPERATYRE SENSOR	1	
38	1301833	4-5259-390-03-0	TEMPERATYRE SENSOR	1	
39	1301841	4-5259-390-05-0	TEMPERATYRE SENSOR	1	
40	1301842	4-5259-290-01-0	TEMPERATYRE SENSOR	1	
41	1300307	RZA-0-4519-021-XX-0	ELECTRONIC EXPANSION VALVE	4*	
42	1300208	RZA-2-4221-623-XX-0	1/4 TUBE	4*	
43	1302908	RZA-0-4515-00B-42-0	1/4' SERVICE VALVE	4*	
44	1203230	RZA-2-2475-017-XX-0	INSULATION CUSHION	4*	
45	1300204	RZA-0-4206-982-XX-0	STAINER ASS'Y	4*	
46	1302912	RZA-0-4518-00B-42-0	3/8 SERVICE VALVE	4*	
47	1301297	RZA-2-4223-067-XX-0	3/8 TUBE	4*	
48	1357788	K37410398	5/8" TUBE ASS'Y	1	AMW3-24U4SKC
	1357737	K37410397		1	AMW4-28U4SKC
49	1203402	RZA-0-4505-008-XX-0	STRAINER	1	
50	1300205	RZA-0-4114-001-XX-0	DISTUIBUTOR ASS'Y	1	AMW3-24U4SKC
	1307360	RZA-0-4207-075-XX-0			AMW4-28U4SKC
51	1300179	RZA-0-4206-985-XX-0	DISTUIBUTOR ASS'Y	1	
52	1300178	RZA-0-4206-977-XX-0	DISTUIBUTOR ASS'Y	1	
53	1357728	K37460146	CONDENSER INLET ASS"Y	1	
54	1300184	RZA-2-4118-001-XX-0	CONDENSER OUTLET TUBE	1	
55	1258657	DG26D2-01(A)	4-WAY VALVE	1	
57	1357312	K37450053	SUCTION PIPE	1	
58	1206624	RZA-0-9507-013-XX-0	PRESSURE SWITCH	1	
59	1357614	K37440100	DISCHARGE PIPE	1	
60	1205562	RZA-2-2475-001-XX-0	CUSHION RUBBER	1	
61	1357284	K37330218	CONDENSER ASS'Y	1	AMW3-24U4SKC
	1357849	K37330219		1	AMW4-28U4SKC
65	1358918	K37210164	COMPRESSOR ASS'Y	1	
68	1300250	RZA-2-2476-176-XX-0	SOUND INSULATION PAD	1	
70	1205547	RZA-2-2476-135-XX-0	SOUND INSULATION PAD	1	
71	1324503	K33AB0034	SOUND INSULATION PAD	1	
72	1301887	RZA-4-2649-081-XX-0	EEV COIL	4*	
73	8006239	K1C070004	INSULATION PAD	2	
74***	1312582	K1C510001	TEMPERATYRE SENSOR	1	
75***	1312591	K1C510002	TEMPERATYRE SENSOR	1	
76	1304193	RZA-0-5306-027-XX-1	TERMINAL PANEL	1	

Note:

9. PARTS LIST

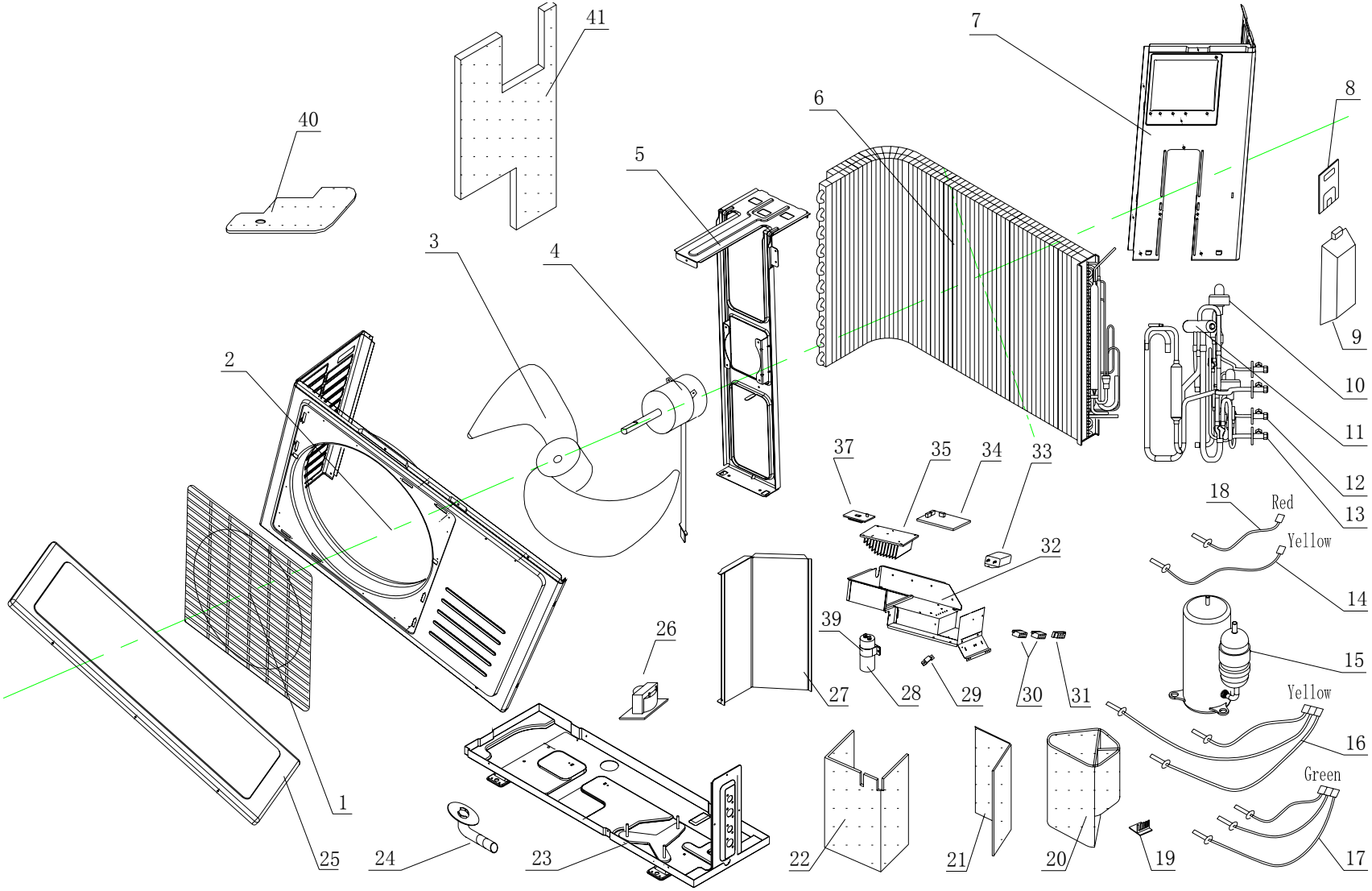
* For AMW3-24U4SKC, the quantity is 3 instead of 4

** For AMW3-24U4SKC, the quantity is 4 instead of 5

*** The item is only for AMW4-28U4SKC.

9. PARTS LIST

9-3. Outdoor （AMW2-20U4SNC）

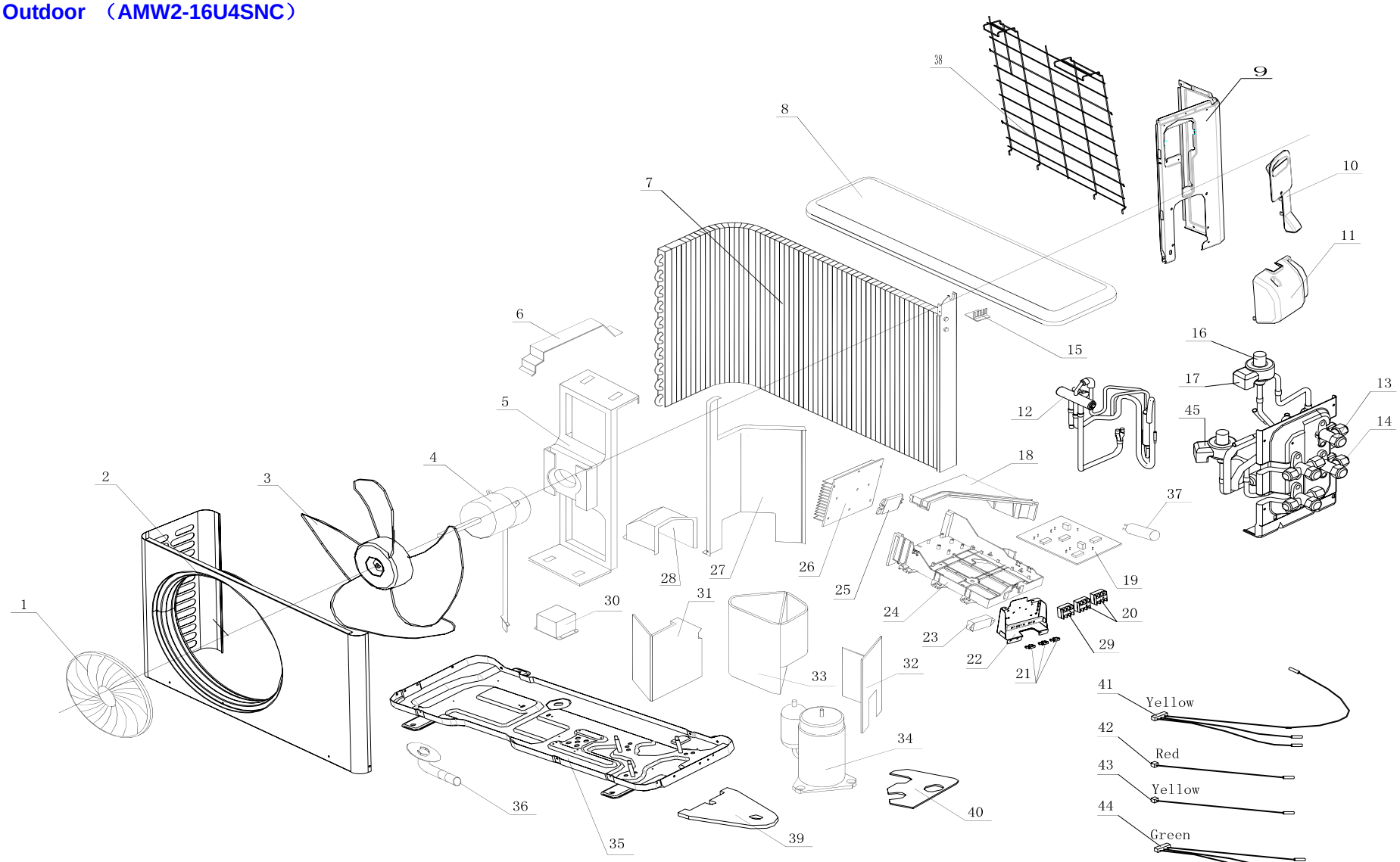


9. PARTS LIST

KEY NO.	PART CODE	PART NO.	DESCRIPTION	Q'TY	NOTE
1	1202499	RZA-2-1321-002-XX-0	FAN GUARD	1	
2	8004546	K31470066	FRONT PANEL	1	
3	1324263	K38310006	PROPELLER FAN	1	
4	1323471	K1B310044	FAN MOTOR ASSY	1	
5	1333872	K331F0030	FAN MOTOR SUPPORTER	1	
6	1327595	K37340102	CONDENSER ASSY	1	
7	8004547	K31220010	BACK PANEL	1	
8	1202470	RZA-0-5302-003-XX-0	SIDE COVER ASSY	1	
9	1206659	RZA-2-2369-001-XX-1	VALVE COVER	1	
10	1300307	RZA-0-4519-021-XX-0	ELECTRICAL EXPANSION VALVE	2	
11	1349489	K37410374	4-WAY VALVE	1	
12	1204863	RZA-0-4515-01B-41-0	1/4 VALVE ASSY	2	
13	1204849	RZA-0-4518-02B-41-0	3/8 VALVE ASSY	2	
14	1301842	4-5259-290-01-0	TEMPERATURE SENSOR	1	
15	1341332	K37210142	COMPRESSOR ASSY	1	
16	1301839	4-5259-390-04-0	TEMPERATURE SENSOR	1	
17	1301842	4-5259-290-01-0	TEMPERATURE SENSOR	1	
18	1312582	K1C510001	TEMPERATURE SENSOR	1	
19	1204958	RZA-2-5303-054-XX-0	SENSOR MOUNT ASSY	1	
20	1303873	RZA-2-2476-196-XX-0	NOISE DEFENING COVER(1)	1	
21	1312877	K33AB0008	NOISE DEFENING COVER(2)	1	
22	1334747	K33AB0045	NOISE DEFENING COVER(3)	1	
23	1349535	K31120094	BASE ASSY	1	
24	1204014	852-2-2228-132-02-0	DRAINAGE HOSE	1	
25	1324726	K31720005	COVER	1	
26	1205797	RZA-4-2649-066-XX-0	INDUCTANCE ASSY	1	
27	1324836	K33670006	PARTITION SUPPORT PLATE ASSY	1	
28	1205734	RZA-0-2239-010-XX-0	Al ELECTROANALYSIS CAPACITOR	1	
29	1304089	RZA-2-5304-092-XX-0	CLIP	3	
30	1301881	4-2379-123-03-0	TERMINAL PANEL ASSY	2	
31	1304193	RZA-0-5306-027-XX-1	TERMINAL PANEL ASSY	1	
32	1340852	K33540024	ELECTRICAL BOX	1	
33	1305257	RZA-0-5220-024-XX-0	FILTER	1	
34	1327865	K36410802	CONTROL BOARD ASSY	1	
35	1334466	K33AE0009	RADIATOR	1	
37	1332616	K36470072	IPM ASSY	1	
39	1202283	RZA-2-5301-002-XX-0	fixing clip	1	
40	1324503	K33AB0034	NOISE DEFENING COVER(3)	1	
41	1311770	K33AB0007	NOISE DEFENING COVER(3)	1	

9. PARTS LIST

9-3. Outdoor （AMW2-16U4SNC）



9. PARTS LIST

KEY NO.	PART CODE	PART NO.	DESCRIPTION	Q'TY	NOTE
1	1203960	852-2-1321-156-01-0	FAN GUARD	1	
2	1203959	RZA-2-1112-024-XX-0	FRONT PANEL	1	
3	1317536	K38310004	PROPELLOR FAN	1	
4	1354934	K1B310187	FAN MOTOR ASSY	1	
5	1204938	RZA-2-2354-023-XX-0	FAN SUPPORTER	1	
6	1203635	RZA-2-2208-025-XX-0	STRENGTHEN PANEL	1	
7	1353542	K37340257	CONDENSER ASSY	1	
8	1203956	RZA-0-2309-040-XX-0	TOP COVER ASSY	1	
9	1353370	K31220091	SIDE PANEL	1	
10	1353367	K33810034	WIRING DISTRIBUTION COVER ASSY	1	
11	1354044	K33880006	VALVE COVER	1	
12	1301088	RZA-0-4509-015-XX-0	4-WAY VALVE	1	
13	1332693	RZA-0-4515-00B-41-0	1/4 VALVE ASSY	1	
14	1335015	RZA-0-4518-00B-41-0	3/8 VALVE ASSY	1	
15	1315560	RZA-0-5303-052-XX-0	SENSOR BRACKET	1	
16	1300307	RZA-0-4519-021-JT-0	ELECTRIC EXPANSION VALVE	2	
17	1206640	RZA-4-2649-074-XX-0	ELECTROMAGNETIC COIL	1	
18	1204048	RZA-0-5302-011-XX-1	ELECTRICAL BOX ASSY	1	
19	1354179	K36411936	CONTROL BOARD	1	
20	1301881	4-2379-123-03-0	TERMINAL PANEL	2	
21	1206639	RZA-2-9030-012-XX-0	CLIP ASSY	3	
22	1353381	K33170065	TERMINAL BOARD ASSY	1	
23	1305257	RZA-0-5220-024-XX-0	EMI FILTER	1	
24	1315782	K33530007	ELECTRICAL BOX	1	
25	1335693	K36470069	DRIVER BOARD	1	
26	1347749	K33AE0016	RADIATOR	1	
27	1341476	K33670019	SEPERATOR SUPPORT PLATE	1	
28	1204046	RZA-0-5315-016-XX-0	COVER ASSY	1	
29	1352970	K36E10043	TERMINAL PANEL	1	
30	1205797	RZA-4-2649-066-XX-0	PFC REACTOR	1	
31	1336461	K33AB0050	NOISE DEFENING COVER(1)	1	
32	1369591	K33AB0069	NOISE DEFENING COVER(2)	1	
33	1303873	RZA-2-2476-196-XX-0	NOISE DEFENING COVER(3)	1	
34	1341332	K37210142	COMPRESSOR ASSY	1	
35	1353326	K31120104	BASE ASSY	1	
36	1204014	852-2-2228-132-02-0	DRAINAGE HOSE	1	
37	1304655	RZA-4-2239-090-XX-0	CAPACITOR	1	
38	1203577	RZA-2-1111-014-XX-0	BACK GUARD	1	

9. PARTS LIST

39	1205548	RZA-2-2476-137-XX-0	NOISE DEFENING COVER(4)	1	
40	1336465	K33AB0052	NOISE DEFENING COVER(5)	1	
41	1301839	4-5259-390-04-0	TEMP SENSOR ASSY	1	
42	1312582	K1C510001	TEMP SENSOR ASSY	1	
43	1301842	4-5259-290-01-0	TEMP SENSOR ASSY	1	
44	1301832	4-5259-390-02-0	TEMP SENSOR ASSY	1	
45	1206641	RZA-4-2649-075-XX-0	ELECTROMAGNETIC COIL	1	